



#8

## SEQUENCE LISTING

<110> Corvalan, Jose R.F.  
Jia, Xiao-Chi  
Feng, Xiao  
Yang, Xiao-Dong  
Chen, Francine  
Gazit, Gadi  
Weber, Richard  
Bezabeh, Binyam

<120> ANTIBODIES DIRECTED TO PDGFD AND USES  
THEREOF

<130> ABGENIX.051A

<140> US 10/041,860

<141> 2002-01-07

<160> 377

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 99

<212> PRT

<213> homo sapiens

<400> 1

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala
1				5					10					15	
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Ser	Tyr
		20						25					30		
Asp	Ile	Asn	Trp	Val	Arg	Gln	Ala	Thr	Gly	Gln	Gly	Leu	Glu	Trp	Met
	35					40						45			
Gly	Trp	Met	Asn	Pro	Asn	Ser	Gly	Asn	Thr	Gly	Tyr	Ala	Gln	Lys	Phe
	50					55					60				
Gln	Gly	Arg	Val	Thr	Met	Thr	Arg	Asn	Thr	Ser	Ile	Ser	Thr	Ala	Tyr
	65			70					75					80	
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85					90					95	
Ala	Arg	Gly													

<210> 2

<211> 98

<212> PRT

<213> homo sapiens

<400> 2

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala
1				5					10					15	
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Ser	Tyr
		20						25					30		
Gly	Ile	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Met



<212> PRT

<213> homo sapiens

<400> 5

```
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly
 1           5           10           15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn
 20           25           30
Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35           40           45
Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
 50           55           60
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
 65           70           75           80
Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85           90           95
```

Arg

<210> 6

<211> 98

<212> PRT

<213> homo sapiens

<400> 6

```
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1           5           10           15
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
 20           25           30
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
 35           40           45
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
 50           55           60
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
 65           70           75           80
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
 85           90           95
```

Ala Arg

<210> 7

<211> 95

<212> PRT

<213> homo sapiens

<400> 7

```
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
 1           5           10           15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp
 20           25           30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35           40           45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50           55           60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
```

65                      70                      75                      80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Asn Ser Phe Pro  
                          85                      90                      95

<210> 8  
 <211> 100  
 <212> PRT  
 <213> homo sapiens

<400> 8  
 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
   1                                  5                                  10                                  15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
                                   20                                  25                                  30  
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
                                   35                                  40                                  45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro  
                                   50                                  55                                  60  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
   65                                  70                                  75                                  80  
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala  
                                   85                                  90                                  95  
 Leu Gln Thr Pro  
                                   100

<210> 9  
 <211> 95  
 <212> PRT  
 <213> homo sapiens

<400> 9  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
   1                                  5                                  10                                  15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr  
                                   20                                  25                                  30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile  
                                   35                                  40                                  45  
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
                                   50                                  55                                  60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
   65                                  70                                  75                                  80  
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro  
                                   85                                  90                                  95

<210> 10  
 <211> 96  
 <212> PRT  
 <213> homo sapiens

<400> 10  
 Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
   1                                  5                                  10                                  15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser  
                                   20                                  25                                  30

Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
           35                  40                  45  
 Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
           50                  55                  60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu  
 65                  70                  75                  80  
 Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro  
                   85                  90                  95

<210> 11  
 <211> 95  
 <212> PRT  
 <213> homo sapiens

<400> 11  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
   1                  5                  10                  15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
           20                  25                  30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
           35                  40                  45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
           50                  55                  60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65                  70                  75                  80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro  
                   85                  90                  95

<210> 12  
 <211> 381  
 <212> PRT  
 <213> homo sapiens

<400> 12  
 Pro Met His Arg Leu Ile Phe Val Tyr Thr Leu Ile Cys Ala Asn Phe  
   1                  5                  10                  15  
 Cys Ser Cys Arg Asp Thr Ser Ala Thr Pro Gln Ser Ala Ser Ile Lys  
           20                  25                  30  
 Ala Leu Arg Asn Ala Asn Leu Arg Arg Asp Glu Ser Asn His Leu Thr  
           35                  40                  45  
 Asp Leu Tyr Arg Arg Asp Glu Thr Ile Gln Val Lys Gly Asn Gly Tyr  
           50                  55                  60  
 Val Gln Ser Pro Arg Phe Pro Asn Ser Tyr Pro Arg Asn Leu Leu Leu  
 65                  70                  75                  80  
 Thr Trp Arg Leu His Ser Gln Glu Asn Thr Arg Ile Gln Leu Val Phe  
                   85                  90                  95  
 Asp Asn Gln Phe Gly Leu Glu Glu Ala Glu Asn Asp Ile Cys Arg Tyr  
                   100                  105                  110  
 Asp Phe Val Glu Val Glu Asp Ile Ser Glu Thr Ser Thr Ile Ile Arg  
                   115                  120                  125  
 Gly Arg Trp Cys Gly His Lys Lys Glu Val Pro Pro Arg Ile Lys Ser Arg  
           130                  135                  140  
 Thr Asn Gln Ile Lys Ile Thr Phe Lys Ser Asp Asp Tyr Phe Val Ala  
 145                  150                  155                  160  
 Leu Ala Lys Pro Gly Phe Lys Ile Tyr Tyr Ser Leu Leu Glu Asp Phe



<400> 14  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu  
 85 90 95  
 Thr Phe Gly Gly Thr Lys Val Glu Ile Lys  
 100 105

<210> 15  
 <211> 120  
 <212> PRT  
 <213> homo sapiens

<400> 15  
 Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn  
 20 25 30  
 Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys  
 50 55 60  
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu  
 65 70 75 80  
 Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala  
 85 90 95  
 Gly Thr Val Thr Thr Asn Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln  
 100 105 110  
 Gly Thr Thr Val Thr Val Ser Ser  
 115 120

<210> 16  
 <211> 111  
 <212> PRT  
 <213> homo sapiens

<400> 16  
 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
 1 5 10 15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Gln Ser  
 20 25 30  
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
 35 40 45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro  
 50 55 60  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile

65                      70                      75                      80  
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Cys Met Gln Ala  
                     85                      90                      95  
 Leu Gln Thr Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys  
                     100                      105                      110

<210> 17  
 <211> 126  
 <212> PRT  
 <213> homo sapiens

<400> 17  
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Lys  
   1                    5                    10                    15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
                     20                    25                    30  
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
                     35                    40                    45  
 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
                     50                    55                    60  
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
   65                    70                    75                    80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
                     85                    90                    95  
 Ala Arg Asp Gln Gly Tyr Arg Tyr Ala Gly Tyr Tyr Tyr Asp Tyr Gly  
                     100                    105                    110  
 Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
                     115                    120                    125

<210> 18  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 18  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
   1                    5                    10                    15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
                     20                    25                    30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
                     35                    40                    45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
                     50                    55                    60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
   65                    70                    75                    80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu  
                     85                    90                    95  
 Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys  
                     100                    105

<210> 19  
 <211> 126  
 <212> PRT  
 <213> homo sapiens



<400> 19  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Glu Gly Ile Ala Val Ala Gly Thr Tyr Tyr Tyr Tyr Gly  
 100 105 110  
 Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 20  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 20  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Phe Cys Leu Gln His Asn Ser Tyr Pro Phe  
 85 90 95  
 Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys  
 100 105

<210> 21  
 <211> 126  
 <212> PRT  
 <213> homo sapiens

<400> 21  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr

```

65          70          75          80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
      85          90          95
Ala Arg Asp Val Met Ile Thr Phe Gly Gly Val Ile Val His Tyr Gly
      100          105          110
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
      115          120          125

```

```

<210> 22
<211> 107
<212> PRT
<213> homo sapiens

```

```

<400> 22
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1      5      10      15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
      20      25      30
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
      35      40      45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
      50      55      60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65          70          75          80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Asp Pro Cys
      85          90          95
Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Arg
      100          105

```

```

<210> 23
<211> 126
<212> PRT
<213> homo sapiens

```

```

<400> 23
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1      5      10      15
Ser Leu Lys Ile Ser Cys Glu Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
      20      25      30
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
      35      40      45
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
      50      55      60
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
65          70          75          80
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
      85          90          95
Ala Arg His Val Ser Tyr Tyr Tyr Val Ser Gly Ser Tyr Tyr Asn Val
      100          105          110
Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
      115          120          125

```

```

<210> 24
<211> 107

```

<212> PRT  
 <213> homo sapiens

<400> 24  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Arg Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp  
 85 90 95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
 100 105

<210> 25  
 <211> 126  
 <212> PRT  
 <213> homo sapiens

<400> 25  
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr  
 20 25 30  
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ala Asp Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
 50 55 60  
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
 65 70 75 80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Asp Gln Gly Tyr Ser Tyr Gly Tyr Val Tyr Tyr Asp Tyr Gly  
 100 105 110  
 Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 26  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 26  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly

50                      55                      60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65                      70                      75                      80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp  
                     85                      90                      95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
                     100                      105

<210> 27  
 <211> 126  
 <212> PRT  
 <213> homo sapiens

<400> 27  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1                      5                      10                      15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Arg Phe Thr Ser Tyr  
                     20                      25                      30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
                     35                      40                      45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
                     50                      55                      60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65                      70                      75                      80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
                     85                      90                      95  
 Ala Arg His Gly Ser Tyr Tyr Tyr Gly Ser Glu Thr Tyr Tyr Asn Val  
                     100                      105                      110  
 Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser  
                     115                      120                      125

<210> 28  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 28  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1                      5                      10                      15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
                     20                      25                      30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
                     35                      40                      45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
                     50                      55                      60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65                      70                      75                      80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp  
                     85                      90                      95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
                     100                      105

<210> 29  
 <211> 129

<212> PRT  
 <213> homo sapiens

<400> 29  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20 25 30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
 50 55 60  
 Gln Gly Gln Ala Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
 85 90 95  
 Ala Arg His Val Asp Val Gly Ala Thr Ile Gly Gly Tyr Tyr Tyr Tyr  
 100 105 110  
 Tyr His Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser  
 115 120 125  
 Ser

<210> 30  
 <211> 113  
 <212> PRT  
 <213> homo sapiens

<400> 30  
 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
 1 5 10 15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
 20 25 30  
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
 35 40 45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro  
 50 55 60  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
 65 70 75 80  
 Ser Arg Val Glu Ala Asp Asp Val Gly Val Tyr Tyr Cys Met Gln Ala  
 85 90 95  
 Leu Gln Ser Leu Met Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile  
 100 105 110  
 Lys

<210> 31  
 <211> 127  
 <212> PRT  
 <213> homo sapiens

<400> 31  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr

20 25 30  
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Asp His Tyr Tyr Asp Ser Ser Asp Tyr Leu Tyr Tyr Tyr  
 100 105 110  
 Gly Leu Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 32  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 32  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr  
 20 25 30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Leu  
 85 90 95  
 Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys  
 100 105

<210> 33  
 <211> 127  
 <212> PRT  
 <213> homo sapiens

<400> 33  
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
 20 25 30  
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ala Ile Ile Trp Tyr Asp Gly Asn Asp Lys Tyr Tyr Ala Asp Ser Val  
 50 55 60  
 Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
 65 70 75 80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Gly Tyr Tyr Tyr Asp Ser Ser Asp Tyr Leu Tyr Tyr Tyr Tyr  
 100 105 110

Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 34  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 34  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr  
 20 25 30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Asn Leu Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Ser Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Val Ala Ala Tyr Tyr Cys Gln Lys Cys Asn Ser Ala Pro Trp  
 85 90 95  
 Thr Phe Gly Gln Gly Thr Thr Val Glu Ile Lys  
 100 105

<210> 35  
 <211> 126  
 <212> PRT  
 <213> homo sapiens

<400> 35  
 Glu Val Gln Leu Val Gln Ser Gly Thr Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Arg Phe Thr Ser Tyr  
 20 25 30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
 50 55 60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
 85 90 95  
 Ala Arg His Gly Ser Tyr Tyr Tyr Asn Ser Gly Ser Tyr Tyr Asn Val  
 100 105 110  
 Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser  
 115 120 125

<210> 36  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 36  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly

```

1           5           10           15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
20           25           30
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
35           40           45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50           55           60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65           70           75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
85           90           95
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100          105

```

```

<210> 37
<211> 126
<212> PRT
<213> homo sapiens

```

```

<400> 37
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1           5           10           15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Tyr
20           25           30
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
35           40           45
Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
50           55           60
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Leu Ser Thr Ala Tyr
65           70           75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85           90           95
Ala Arg Asp Ile Val Val Val Val Ala Ala Thr Asn Tyr Tyr Asn Gly
100          105          110
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115          120          125

```

```

<210> 38
<211> 125
<212> PRT
<213> homo sapiens

```

```

<400> 38
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1           5           10           15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20           25           30
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
35           40           45
Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
50           55           60
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
65           70           75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85           90           95

```



Ala Arg Gly Ser Gly Tyr Ser Tyr Gly Tyr Asp Tyr Tyr Tyr Gly Met  
 100 105 110  
 Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 39  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 39  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Asn Cys Arg Ala Ser Gln Gly Ile Ser Asn Asp  
 20 25 30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Thr Leu Gln Leu Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Phe  
 85 90 95  
 Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys  
 100 105

<210> 40  
 <211> 126  
 <212> PRT  
 <213> homo sapiens

<400> 40  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Asn Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Asp Ile Val Val Val Val Thr Ala Thr Asp Tyr Tyr Gly  
 100 105 110  
 Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 41  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 41  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Phe Ala Ala Ser Ser Leu Pro Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Ser Gly Tyr Pro Pro  
 85 90 95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
 100 105

<210> 42  
 <211> 125  
 <212> PRT  
 <213> homo sapiens

<400> 42  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Asp Val Glu Tyr Tyr Tyr Asp Gly Ser Gly Tyr Tyr Phe  
 100 105 110  
 Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser  
 115 120 125

<210> 43  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 43  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp  
 20 25 30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ile Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80

Glu Asp Phe Ala Ser Tyr Tyr Cys Gln Gln Ser Asn Ser Phe Pro Arg  
85 90 95  
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
100 105

<210> 44  
<211> 127  
<212> PRT  
<213> homo sapiens

<400> 44  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
20 25 30  
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Trp Met  
35 40 45  
Gly Trp Met Asn Pro Asn Ser Gly Asp Thr Gly Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys  
85 90 95  
Ala Arg Met Arg Asp Ile Val Ala Thr Ser Tyr Tyr Tyr Tyr Phe Tyr  
100 105 110  
Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
115 120 125

<210> 45  
<211> 111  
<212> PRT  
<213> homo sapiens

<400> 45  
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
1 5 10 15  
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
20 25 30  
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Leu Lys Pro Gly Gln Ser  
35 40 45  
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Ser Arg Ala Ser Gly Val Pro  
50 55 60  
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
65 70 75 80  
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Thr  
85 90 95  
Leu Gln Thr Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys  
100 105 110

<210> 46  
<211> 126  
<212> PRT  
<213> homo sapiens

<400> 46  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20 25 30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Ala Lys Tyr Ser Pro Ser Phe  
 50 55 60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
 85 90 95  
 Ala Arg His Tyr Asp Tyr Val Trp Arg Asn Tyr Arg Tyr Thr Gly Trp  
 100 105 110  
 Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser  
 115 120 125

<210> 47  
 <211> 108  
 <212> PRT  
 <213> homo sapiens

<400> 47  
 Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser  
 20 25 30  
 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
 35 40 45  
 Ile Tyr Gly Ala Ser Asn Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu  
 65 70 75 80  
 Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Leu  
 85 90 95  
 Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys  
 100 105

<210> 48  
 <211> 125  
 <212> PRT  
 <213> homo sapiens

<400> 48  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Ile Asn Pro Asn Ser Gly Asn Thr Asp Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Ile Tyr Tyr Cys  
 85 90 95  
 Val Arg Gly Phe Gly Tyr Ser Tyr Asn Tyr Asp Tyr Tyr Tyr Gly Met  
 100 105 110  
 Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 49  
 <211> 108  
 <212> PRT  
 <213> homo sapiens

<400> 49  
 Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser  
 20 25 30  
 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
 35 40 45  
 Ile Tyr Ala Thr Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu  
 65 70 75 80  
 Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro  
 85 90 95  
 Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys  
 100 105

<210> 50  
 <211> 1828  
 <212> DNA  
 <213> homo sapiens

<400> 50  
 ctataaaata tgttctctac aacaccaagg ctcattaaaa tattttaaat attaatatc 60  
 atttctcttg tcagaaatac ataaaaacttt attatatcag cgcagggcgg cgcggcgctcg 120  
 gtccccggag cagaaccggg ctttttcttg gagcgacgct gtctctatgc gctgatccca 180  
 aatgcaccgg ctcatctttg tctacaactct aatctgcgca aacttttgca gctgtcggga 240  
 cacttctgca accccgcaga gcgcatccat caaagctttg cgcaaccgca acctcaggcg 300  
 agatgagagc aatcacctca cagactttga cgaagagat gagaccatcc aggtgaaagg 360  
 aaacggctac gtgcagagtc ctgagattccc gaacagctac ccagggaacc tgctcctgac 420  
 atggcggtct cactctcagg agaatacacg gatacagcta gtgtttgaca atcagtttgg 480  
 attagaggaa gcagaaaatg atatctgtag gtatgatttt gtggaagtgg aagatatatc 540  
 cgaaccagat accattatta gaggacgatg gtgtggacac aaggaagttc ctccaaggat 600  
 aaaaatcaaga acgaaccaaa ttaaaatcac attcaagtc gatgactact ttgtggctaa 660  
 acctggattc aagatttatt attctttgct ggaagatttc caaccgcgag cagcttcaga 720  
 gaccaactgg gaatctgtca caagctctat ttcaggggta tctataact ctccataact 780  
 aacggatccc actctgattg cggatgtctct ggacaaaaaa attgcagaat ttgatacagt 840  
 ggaagatctg ctcaagtact tcaatccaga gtcatggcaa gaagatcttg agaatatgtc 900  
 tctgacaccc cctcggtatc gaggcaggtc ataccatgac cggaagtcaa aagttgacct 960  
 gatatggctc aatgatgatg ccaagcggtta cagttgcact ccagggaatt actcgggtcaa 1020  
 tataagagaa gagctgaagt tggccaatgt ggtcttcttt ccacgttgcc tctcgtgca 1080  
 gcgctgtgga ggaatttgg gctgtggaac gtgcaactgg aggtcctgtc atgcaattc 1140  
 agggaaaacc gtgaaaaagt atcatgaggt attacagttt gagcctggcc acatcaagag 1200  
 gaggggtaga gctaaagaca tggctctagt tgacatccag ttggatcacc atgaacgatg 1260

tgattgtatc	tcgagctcaa	gaccacctcg	ataagagaat	gtgcacatcc	ttacattaag	1320
cctgaagaaa	cctttagttt	aaggagggtg	agataagaga	cccttttctc	accagcaacc	1380
aaacttacta	ctagcctgca	atgcaatgaa	cacaagtgg	tgctgagctc	cagccttgct	1440
ttgttaatgc	catggcaagt	agaaagggtat	atcatcaact	tctataccta	agaatatagg	1500
attgcattta	ataatagtg	ttgaggttat	atatgcacaa	acacacacag	aaatatattc	1560
atgtctatgt	gtatatagat	caaattgttt	ttttgggtata	tataaccag	tacaccagag	1620
cttacatatg	tttgagttag	actcttaaaa	tcctttggcca	aaataaggga	tggtcaaata	1680
tatgaaacat	gtcttttagaa	aatttaggag	ataaatttat	ttttaaatt	tgaaacacaa	1740
aacaattttg	aattctgtgc	tcttaaagaa	agcatcttgt	atattaaaa	tcaaaagatg	1800
aggctttctt	acatatacat	cttagttg				1828

<210> 51

<211> 22

<212> DNA

<213> homo sapiens

<400> 51

caggtgcagc tggagcagtc gg 22

<210> 52

<211> 24

<212> DNA

<213> homo sapiens

<400> 52

gctgaggag tagagtcctg agga 24

<210> 53

<211> 19

<212> DNA

<213> homo sapiens

<400> 53

cacaccgagc tcacatggc 19

<210> 54

<211> 20

<212> DNA

<213> homo sapiens

<400> 54

ctactctagc gcacctgtcc 20

<210> 55

<211> 379

<212> DNA

<213> homo sapiens

<400> 55

gaggtgcagc	tggtggagtc	tgggggagc	ctgggtcaagc	ctgggggggc	cctgagactc	60
tcctgtgcag	cctctggatt	caaattcaga	acctataaca	tgaactgggt	ccgccaggct	120
ccagggaagg	ggctggagtg	ggtctcatcc	attagtagta	gtagtagtaa	catatactac	180
gcagactcag	tgaaggccg	attcaccatc	tccagagaca	acgccaagaa	ctcactgtat	240
ctgcaaatga	acagcctgag	agccgaggac	acggctgtat	attactgtgc	gagagatatt	300
atgattacgt	ttgggggaat	tatcgccctg	ttctactttg	actactgggg	ccagggaacc	360
ctgggtcaccg	tctcctcag					379

<210> 56  
 <211> 322  
 <212> DNA  
 <213> homo sapiens

<400> 56  
 gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60  
 atcacttgcc gggcaagtc gggcattaga aatgatttag gctgggttca gcagaacca 120  
 gggaaaagccc ctaagcgctt gatctatgct gcattccagtt tgcaaaagtgg ggtcccatca 180  
 aggttcacggc gcagtgagtc tgggacagaa ttcaactctca caatcagcag cctgcagcct 240  
 gaagattttg caacttatta ctgtctacag cataatagtt acccgctcac ttctggcgga 300  
 gggaccaagg tggagatcaa ac 322

<210> 57  
 <211> 361  
 <212> DNA  
 <213> homo sapiens

<400> 57  
 gaggtgcagc tgggtcagtc tggaggaggc ttgatccagc ctgggggggtc cctgagactc 60  
 tctctgtcag cctctgggtt caccgtcagtc agcaactaca tgagctgggt ccgccaggct 120  
 ccagggaagg ggtctggagt ggtctcagtt atttatagcg gtggtagcac atactacgca 180  
 gactccgtga agggccgatt caccatctcc agagacaatt ccaagaacac gctgtatctt 240  
 caaatgaaca gcctgagagc cgaggacacg gccgtgtatt actgtgcggg aacgggtgact 300  
 acgaattact actacggtat ggacgtctcg gcccaaggga ccacggtcac cgtctcctca 360  
 g 361

<210> 58  
 <211> 334  
 <212> DNA  
 <213> homo sapiens

<400> 58  
 gatattgtga tgactcagtc tccactctcc ctgcccgtca cccctggaga gccggcctcc 60  
 atctcctgca ggtctagtca gagcctcctg caaagtaatg gatacaacta ttgtgattgg 120  
 tacctgcaga agccaggcca gtctccacag ctccgtgatct atttgggttc taatcggggc 180  
 tccgggggtc ctgacaggtt cagtggcagtc ggatcaggca cagattttac actgaaaaac 240  
 agcagagtgg aggcctgagg tgttgggggtt tattactgca tgcaagctct acaaacctctc 300  
 actttcggcg gagggaccaa ggtggagatc aaac 334

<210> 59  
 <211> 379  
 <212> DNA  
 <213> homo sapiens

<400> 59  
 cagggtgcagc tgggtgagtc ggggggaggc gtggtccagc ctgggaagtc cctgagactc 60  
 tctctgtcag cgtctgatt caccctcagtc agctatggca tgcaactgggt ccgccaggct 120  
 ccaggcaagg ggtctggagt ggtggcagtt atatggtatg atggaagtaa taatactat 180  
 gcagactccg tgaagggcgg attcaccatc tccagagaca attccaagaa cacgctgtat 240  
 ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagatcaa 300  
 ggatacagat atgctgtgta ctactacgac tacggtatgg acgtctgggg ccaaggggacc 360  
 acggtcaccc tctctcag 379

<210> 60  
 <211> 322  
 <212> DNA

<213> homo sapiens

<400> 60

gacatccaga	tgaccacgac	tccatcctcc	ctgtctgcat	ctgtaggaga	cagagtcacc	60
atcaacttgc	gggcaagtca	gggcattaga	aatgatttag	gctgggtatca	gcagaaacca	120
gggaaagccc	ctaagcgcc	gatctatgct	gcatccagtt	tgcaaaagtg	gggtcccatca	180
aggttcagcg	gcagtggtac	tgggacagaa	ttcactctca	caatcagcag	cctgcagcct	240
gaagattttg	caacttatta	ctgtctacag	cataatagtt	accgcgtcac	tttcggcgga	300
gggaccaagg	tggagatcaa	ac				322

<210> 61

<211> 379

<212> DNA

<213> homo sapiens

<400> 61

caggtgcagc	tggtgcagtc	gggggctgag	gtgaagaagc	ctggggcctc	agtgaaggtc	60
tctctcaagg	cttctggata	caccttcacc	agttatgata	tcaactgggt	gcgacaggcc	120
actggacaag	ggcttgagt	gatgggatgg	atgaaccctaa	acagtggttaa	cacaggctat	180
gcacagaagt	tccagggcag	agtcaccatg	accaggaaca	cctccataag	cacagcctac	240
atggagctga	gcagcctgag	atctgaggac	acggccgtgt	attactgtgc	gagagagggt	300
atagcagtgg	ctgggacata	ctactactac	tacggtatgg	acgtctgggg	ccaagggacc	360
acggtcaccg	tctctcag					379

<210> 62

<211> 322

<212> DNA

<213> homo sapiens

<400> 62

gacatccaga	tgaccacgac	tccatcctcc	ctgtctgcat	ctgtaggaga	cagagtcacc	60
atcaacttgc	gggcaagtca	gggcattaga	aatgatttag	gctgggtatca	gcagaaacca	120
gggaaagccc	ctaagcgcc	gatctatgct	gcatccagtt	tgcaaaagtg	gggtcccatca	180
aggttcagcg	gcagtggtac	tgggacagaa	ttcactctca	caatcagcag	cctgcagcct	240
gaagattttg	caacttattt	ctgtctacag	cataatagtt	accatttcac	tttcggccct	300
gggaccaagg	tggatataca	ac				322

<210> 63

<211> 379

<212> DNA

<213> homo sapiens

<400> 63

caggtgcagc	tggtgcagtc	gggggctgag	gtgaagaagc	ctggggcctc	agtgaaggtc	60
tctctcaagg	cttctggata	caccttcacc	agttatgata	tcaactgggt	gcgacaggcc	120
actggacaag	ggcttgagt	gatgggatgg	atgaaccctaa	acagtggttaa	cacaggctat	180
gcacagaagt	tccagggcag	agtcaccatg	accaggaaca	cctccataag	cacagcctac	240
atggagctga	gcagcctgag	atctgaggac	acggccgtgt	attactgtgc	gagagagctt	300
atgattacgt	tgggggagt	tatcgtgcac	tacggtatgg	acgtctgggg	ccaagggacc	360
acggtcaccg	tctctcag					379

<210> 64

<211> 322

<212> DNA

<213> homo sapiens

<400> 64



gacatccaga	tgaccagtc	tccatcctcc	ctgtctgcat	ctgtaggaga	cagagtcacc	60
atcacttgcc	gggcaagtca	gggcattaga	aatgatttag	gctgggtatca	gcagaaacca	120
gggaaagccc	ctaagcgctt	gatctatgct	gcattccagtt	tgcaaatgtgg	ggtcccatca	180
aggttcagcg	gcagtggtac	tgggacagat	ttcactctca	caatcagcag	cctgcagcct	240
gaagattttg	caacttatta	ctgtctacag	cataatagtg	accctgtcag	ttttggccag	300
gggaccaagc	tgagatcag	ac				322

<210> 65  
 <211> 379  
 <212> DNA  
 <213> homo sapiens

<400> 65						
gaggtgcagc	tggtgcagtc	tggagcagag	gtgaaaagc	ccggggagtc	tctgaagatc	60
tccctgtgagg	gttctggata	cagctttacc	agctactgga	tggctgggt	gcgccagatg	120
cccgggaaag	gcctggagtg	gatggggatc	atctatcctg	gtgactctga	taccagatcc	180
agcccgctct	tccaaggcca	ggtcaccatc	tcagccgaca	agtcocatcag	caccgcctac	240
ctgcagtggg	gcagcctgaa	ggcctcggac	accgccatgt	attactgtgc	gagacatgta	300
tctgtattact	atgttttcggg	gagttattat	aacgtctttg	actactgggg	ccagggaacc	360
ctggtcacccg	tctcctcag					379

<210> 66  
 <211> 322  
 <212> DNA  
 <213> homo sapiens

<400> 66						
gacatccaga	tgaccagtc	tccatcctcc	ctgtctgcat	ctgtaggaga	cagagtcacc	60
atcacttgcc	gggcaagtca	gggcattaga	aatgatttag	gctgggtatca	gcagatacca	120
gggaaagccc	ctaagcgctt	gatctatgct	gcattccagtt	tgcaaatgtgg	ggtcccatca	180
aggttcagcg	gcagtggtac	tgggacagaa	ttcactctca	caatcagcag	cctgcagcct	240
gaagattttg	caacttatta	ctgtctacag	cataatagtg	accctgtgac	gttcggccaa	300
gggaccaagc	tggaatcaa	ac				322

<210> 67  
 <211> 379  
 <212> DNA  
 <213> homo sapiens

<400> 67						
caggtgcagc	tggtggagtc	tgggggagc	gtggtccagc	ctgggagtc	cctgagatc	60
tccctgtgag	cgctcggatt	cagtttcagt	agctatggca	tgactgggt	ccgccaggct	120
ccagggcaag	ggctggagtg	ggtggcagat	atatggtatg	atggaagtga	taaatactat	180
gcagactccg	tgaaggccg	attcaccatc	tccagagaca	attccaagaa	cacgctgtat	240
ctgcaaatga	acagcctcag	agccgaggac	acggctgtgt	attattgtgc	gagagatcag	300
ggatacagct	atggttacgt	ctactacgac	tacggtagtg	acgtctgggg	ccaagggacc	360
acggtcacccg	tctcctcag					379

<210> 68  
 <211> 322  
 <212> DNA  
 <213> homo sapiens

<400> 68						
gacatccaga	tgaccagtc	tccatcctcc	ctgtctgcat	ctgtaggaga	cagagtcacc	60
atcacttgcc	gggcaagtca	gggcattaga	aatgatttag	gctgggtatca	gcagaaacca	120
gggaaagccc	ctaagcgctt	gatctatgct	gcattccagtt	tgcaaatgtgg	ggtcccatca	180

```

agggttcagcg gcagtggtgac tgggacagag ttcaactctca caatcagcag cctgcagcct 240
gaagatttttg caacttatta ctgtctacag cataaatagtt acccggtggac gttcgggcaa 300
gggaccaagtg tggaaatcaa ac 322

```

<210> 69

<211> 379

<212> DNA

<213> homo sapiens

<400> 69

```

gaggtgcagc tgggtcagtc gggagcagag gtgaaaaagc ccggggagtc tctgaagatc 60
tctctgaagc gttcttgata cagggtttacc agctactgga tcggctgggt gcgccagatg 120
cccgggaaag gccctggagtg gatggggatc atctatctctg gtgactctga taccagatgc 180
agccctctct tcacaagcca ggccaccatc tcagccgaca agtccatcag caccgcctac 240
ctgcagtggg gcagcctgaa ggccctcgac accgccaatg attactgtgc gagacatgga 300
tcgtattatt atggttcgga gacttattat aatgtctttg actactgggg ccaggggaacc 360
ctggtcaccg tctctcag 379

```

<210> 70

<211> 322

<212> DNA

<213> homo sapiens

<400> 70

```

gacatccgca tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcaactgcc ggccaagtca gggcattaga aatgatttag gctgtatca gcagaaacca 120
gggaaagccc ctaagccctt gatctatgct gcattccagt tcgaaaagtg ggtcccatca 180
agggttcagc gcagtggtgac tgggacagaa ttcaactctca caatcagcag cctgcagcct 240
gaagatttttg caacttatta ctgtctacag cataaatagtt acccggtggac gttcgggcaa 300
gggaccaagtg tggaaatcaa ac 322

```

<210> 71

<211> 388

<212> DNA

<213> homo sapiens

<400> 71

```

gaggtgcagc tgggtcagtc gggagcagag gtgaaaaagc ccggggagtc tctgaagatc 60
tctctgaagc gttcttgata cagggtttacc agctactgga tcggctgggt gcgccagatg 120
cccgggaaag gccctggagtg gatggggatc atctatctctg gtgactctga taccagatgc 180
agccctctct tcacaagcca ggccaccatc tcagccgaca agtccatcag caccgcctac 240
ctgcagtggg gcagcctgaa ggccctcgac accgccaatg attactgtgc gagacacgtg 300
gatgtagggg ctacgatctg gggatattac tattactacc acggatagga cgtctggggc 360
caagggacca cggtcaccgt ctctcag 388

```

<210> 72

<211> 340

<212> DNA

<213> homo sapiens

<400> 72

```

gatattgtga tgactcagtc tccactctcc ctgcccgta cccctggaga gccggcctcc 60
atctctgca ggtctagtc gagcctcctg catagtaatg gatacaacta tttggattgg 120
taactgcaga agccaggcca gtctccacaa ctctgatct atttgggttc taatcgggcc 180
tccggggctc ctgacaggtt cagtggcagt ggatcaggca cagattttac actgaaaatc 240
agcagagtgg aggctgacga tgttgggggt tattactgca tgaagactct acaatctctc 300
atgtgcagtt ttggccaggg gaccaagctg gagatcaaac 340

```

```

<210> 73
<211> 382
<212> DNA
<213> homo sapiens

<400> 73
cagggttcagc tgggtgcagtc gggagctgag gtgaagaagc ctgggggcctc agtgaaggtc 60
tcctgcaagg ctctcggtta caccctttacc agctatggta tcagctgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggatgg atcagcgctt acaatggtaa cacaaactat 180
gcacagaagc tccagggcag agtcaccatg accacagaca catccacgag cacagcctac 240
atggagctga ggagcctgag atctgacgac acggccgtgt attactgtgc gagagatcat 300
tactatgata gtagtgatta tctctactac tactacgggt tggacgtctg gggccaaggg 360
accacggtca cgtctctctc ag 382

<210> 74
<211> 322
<212> DNA
<213> homo sapiens

<400> 74
gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcaactgcc gggcgagtc gggcattagc aattatttag cctgggtatca gcagaaacca 120
gggaaagtgc ctaagctcct gatctatgct gcattccactt tgcaatcagg ggtcccatct 180
cggttcagtg gcagtgatgc tgggacagat ttactctcta ccatcagcag cctgcagcct 240
gaagatgttg caacttatta ctgtcaaaag tataacagtg ccccgctcac ttctggcgga 300
gggaccaagg tggagatcaa ac 322

<210> 75
<211> 382
<212> DNA
<213> homo sapiens

<400> 75
cagggtgcagc tgggtggagtc ggggggaggc gtggtccagc ctggggagtc cctgagactc 60
tcctgtgcag cgtctggatt cacccttcagt agctatggca tgcaactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcaatt atatggtatg atggaatga taatactat 180
gcagactccg tgaagggccg ctccacgcgc tccagagaca atccaaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagaggata 300
tactatgata gtagtgatta tctctactac tactacggta tggacgtctg gggccaaggg 360
accacggtca cgtctctctc ag 382

<210> 76
<211> 322
<212> DNA
<213> homo sapiens

<400> 76
gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcaactgcc gggcgagtc gggcattagc aattatttag cctgggtatca gcagaaacca 120
gggaaagtgc ctaacctcct gatctatgct gcattccactt tgcaatcagg ggtcccatct 180
cggttcagtg gcagtgatgc tgggacagat ttctctctca ccatcagcag cctgcagcct 240
gaagatgttg cagcttatta ctgtcaaaag tgtaacagtg ccccgaggag gttccggcca 300
gggaccacgg tggagatcaa ac 322

<210> 77
<211> 379

```

```

<212> DNA
<213> homo sapiens

<400> 77
gagggtgcagc tgggtgcagtc gggaacagag gtgaaaaagc ccgggggagtc tctgaagatc 60
tccgtgtaagg gttctggata caggtttacc agctactgga tcggctgggt gcgccagatg 120
cccggggaaag gctctggagt gatggggatc atctatcctg gtgactctga taccagatag 180
agcccggtcct tccaaggcca ggtcaccatc tcagccgaca agtccatcag caccgcctac 240
ctgcagtgga gcagcctgaa ggccctcgac acgcgccatg attactgtgc gagacatgga 300
tcgtattact ataattcggg gagtattat aacgctcttg actactgggg ccagggaacc 360
ctggtcaccg tctcctcag

<210> 78
<211> 322
<212> DNA
<213> homo sapiens

<400> 78
gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcaactggcc gggaagtca gggcattaga aatgatttag gctgggtatca gcagaaacca 120
gggaaagccc ctaagcgccct gatctatgct gcattccagtt tgcaaaagtgg ggtcccatca 180
aggttcagcg gcagtgatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caactatta ctgtctacag cataatagtt acccgtggac gttcggccaa 300
gggaccaagg tggaaatcaa ac
322

<210> 79
<211> 379
<212> DNA
<213> homo sapiens

<400> 79
cagggtgcagc tgggtgcagtc gggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60
tccgtgcaagg cttctggata caccttcacc acttatgata tcaactgggt gcgacaggcc 120
actggacaag ggcttgagt gatgggatgg atgaacccta acagtggtaa cacaggctat 180
gcacagaagt tccagggcag agtcaccatg accaggaaca cctccctaag cacagcctac 240
atggagctga gcagcctgag atctaggac accggccgtgt attactgtgc gagagatatt 300
gtagtgggtg tagctgctac caactactac aacggtatgg acgtctgggg ccaagggacc 360
acggtcaccg tctcctcag

<210> 80
<211> 376
<212> DNA
<213> homo sapiens

<400> 80
cagggtgcagc tgggtgcagtc gggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60
tccgtgcaagg cttctggata caccttcacc agttatgata tcaactgggt gcgacaggcc 120
actggacaag ggcttgagt gatgggatgg atgaacccta acagtggtaa cacaggctat 180
gcacagaagt tccagggcag agtcaccatg accaggaaca cctccctaag cacagcctac 240
atggagctga gcagcctgag atctaggac accggccgtgt attactgtgc gagagcagat 300
ggatacagct atggttacga ctactactac ggtatggagc tctggggcca agggaccacg 360
gtcaccgtct cctcag

<210> 81
<211> 322
<212> DNA
<213> homo sapiens

```

<400> 81  
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60  
atcaattgcc gggcgagtc gggcattagc aatgatttag cctgggtatca gcagaaacca 120  
gggaaagtc ctaagctcct gatctatgct gcattccatt tgcaatttag ggtcccatct 180  
cggttcagtg gcagtgatc tgggacagat ttcaactctca ccattcagcag cctgcagcct 240  
gaagatgttg caacttatta ctgtcaaaag tataacagtg cccattcac ttctggccct 300  
gggaccaaag tggatatcaa ac 322

<210> 82  
<211> 379  
<212> DNA  
<213> homo sapiens

<400> 82  
caggtgcagc tgggtgcagtc gggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60  
tcctgcaagg ctcttgagata ctctctcacc agttatgata tcaactgggt gcgacaggcc 120  
actggacaag ggcttgagtg gatgggatgg atgaacccta acaatggtaa cacaggctat 180  
gcacagaagt tccagggcag agtcaccatg accaggaaca cctccataag cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagagatatt 300  
gtagtgtgtg taactgctac ggactactac tacggtatgg acgtctgggg ccaaggggacc 360  
acggctcaccg tctcctcag 379

<210> 83  
<211> 322  
<212> DNA  
<213> homo sapiens

<400> 83  
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60  
atcacttgcc gggcaagtc gggcattaga aatgatttag gctgggtatca gcagaaacca 120  
gggaaagccc ctaagcgccct gatctttgct gcattccagtt tgccaagtgg ggtcccatca 180  
agggttcagcg gcagtgatc tgggacagaa ttcaactctca caatcagcag cctgcagcct 240  
gaagattttg caacttatta ctgtctacag catagtgggt accctccgac gttcggccaa 300  
gggaccaagg tggaaatcaa ac 322

<210> 84  
<211> 376  
<212> DNA  
<213> homo sapiens

<400> 84  
caggttcagc tgggtgcagtc gggagctgag gtgaagaagc ctggggcctc agtgaaggtc 60  
tcctgcaagg ctcttgagta caccttacc agctatggtt tcagctgggt gcgacaggcc 120  
cctgggcaag ggcttgagtg gatgggatgg atcagcgctt acaatggtaa cacaaactat 180  
gcacagaagc tccagggcag agtcaccatg accacagaca catccacgag cacagcctac 240  
atggagctga ggagcctgag atctgacgac acggccgtgt attactgtgc gagagatgtt 300  
gaatattact atgatggtag tgggtattac tactttgact actggggcca gggaaacctg 360  
gtcacctgct cctcag 376

<210> 85  
<211> 322  
<212> DNA  
<213> homo sapiens

<400> 85  
gacatccaga tgacccagtc tccatcttcc gtgtctgcat ctgtaggaga cagagtcacc 60

atcaactgttc	ggcgagtgca	gggtattagc	agctgggttag	cctgggtatca	gcagaaacca	120
gggaaagccc	ctaagctcct	gatctatgct	gcattccattt	tgcaaaagtgg	ggtcccatca	180
aggttcagcg	gcagtggtgc	tgggacagat	ttcaactctca	ccatcagcag	cctgcagcct	240
gaggattttg	catcttacta	ttgtcaacag	tctaacagtt	tccctcggac	gttcggccaa	300
gggaccaagg	tgagatcaa	ac				322

<210> 86  
 <211> 362  
 <212> DNA  
 <213> homo sapiens

<400> 86						
caggtgcagc	tggtgcagtc	gggggctgag	gtgaagaagc	ctggggcctc	agtgaaggtc	60
tccctgcaag	cttctggata	caccttcacc	agttatgata	tcaactgggt	gcgacaggcc	120
actggacaag	ggcttgatg	gatgggatgg	atgaacccta	acagtgggta	cacaggctat	180
gcacagaagt	tccagggcag	agtcaccatg	accaggaaca	cctccataag	cacagcctac	240
atggagctga	gcagcctgag	atctgaggac	acggccgtgt	atttctgtgc	gagaatgagg	300
gatatagtgg	ctacgagcta	ttactactac	ttctacggta	tggaactctg	gggccaaggg	360
accacggtca	cgtctcctc	ag				382

<210> 87  
 <211> 334  
 <212> DNA  
 <213> homo sapiens

<400> 87						
gatattgtga	tgactcagtc	tccactctcc	ctgcccgtca	cccctggaga	gcgggcctcc	60
atctctctga	ggcttagtca	gagcctcctg	catagtaatg	gatacaacta	tttggtattg	120
tacctgtgta	agccaggcca	gtctccacag	ctcctgatct	atttgggttc	tagtcggggc	180
tccgggttcc	ctgacaggtt	cagtggcagt	ggatcaggca	cagattttac	actgaaaatc	240
agcagagtgg	agggctgagg	tggtggggtt	tattactgca	tgcaaaactc	acaaactatc	300
accttcgccg	aagggaacag	actggagatt	aaac			334

<210> 88  
 <211> 379  
 <212> DNA  
 <213> homo sapiens

<400> 88						
gaggtgcagc	tggtgcagtc	gggagctgag	gtgaaaaagc	ccggggagtc	tctgaagatc	60
tccctgtaag	gttctggata	cagctttacc	agctactgga	tcggtcgggt	gcgccagatg	120
cccgggaaag	gcctggagtg	gatggggatc	atctatcctg	gtgaactctga	tgccaaatcc	180
agcccgtctc	tcaaggccca	ggtcaccatc	tcagccgaca	agtcacatag	caccgcctac	240
ctgcagtgga	gcagcctgaa	ggcctcgga	accgcactgt	attactgtgc	gagacactat	300
gattacgttt	ggaggaaata	toggatata	gggtgggttc	accctctggg	ccagggaacc	360
ctgggtcaccg	tctctcag					379

<210> 89  
 <211> 325  
 <212> DNA  
 <213> homo sapiens

<400> 89						
gaaattgtgt	tgacgcagtc	tccaggcacc	ctgtctttgt	ctccagggga	aagagccacc	60
ctctcctgca	ggggcagtc	gagtgttagc	agcagctact	tagccttgta	ccagcagaaa	120
cctggccagg	ctccaggtct	cctcatctat	gggcatcca	acagggccac	tggtatccca	180
gacaggttca	gtggcagtg	gtctgggaca	gacttcactc	tcaccatcag	cagactggag	240

```

cctgaagatt ttgcagtgt ttaactgtcag cagtatggta gctcactatt cacttttcggc 300
cctgggacca aagtggatat caaac 325

<210> 90
<211> 377
<212> DNA
<213> homo sapiens

<400> 90
caggtgcagc tgggtcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60
tcctgcaagg cttctggata caccttcacc agttatgata tcaactgggt gcgacaggcc 120
actggacaag ggcttgagt gatgggatgg ataaacccta atagtggtaa cacagactat 180
gcacagaagt tccagggcag agtcaccatg accaggggaca cctccataag cacagcctac 240
atggagctga gcagcctgag atctgaggac accggccatat attattgtgt gagaggcttt 300
ggatacagct ataattacga ctactattac ggtatggacg tctggggcca agggaccacg 360
gtcaccgtct cctcagt 377

<210> 91
<211> 325
<212> DNA
<213> homo sapiens

<400> 91
gaaatttgtt tgacgcagtc tccaggcacc ctgtctttgt ctccaggggg aagagccacc 60
ctctcctgca gggccagtc gagtgttagt agtagttact tagcctggta ccagcagaag 120
cctggccagg ctcccaggct cctcatctat gctacatcca gcaggggcac tggcatccca 180
gacaggttca gtggcagtg gtctgggaca gacttcact tcaccatcag cagactggag 240
ctgaagatt ttgcagtgt ttaactgtcag cagtatggta gttcaccgtg cagttttggc 300
caggggacca agctggaaat caagc 325

<210> 92
<211> 6
<212> DNA
<213> homo sapiens

<400> 92
cgagag 6

<210> 93
<211> 28
<212> DNA
<213> homo sapiens

<400> 93
ttatgattac gtttggggga gttatcgt 28

<210> 94
<211> 6
<212> DNA
<213> homo sapiens

<400> 94
actacg 6

<210> 95
<211> 6
<212> DNA

```

<213> homo sapiens	
<400> 95	
gagagg	6
<210> 96	
<211> 12	
<212> DNA	
<213> homo sapiens	
<400> 96	
tggatacagc ta	12
<210> 97	
<211> 8	
<212> DNA	
<213> homo sapiens	
<400> 97	
attactac	8
<210> 98	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 98	
ttaccc	6
<210> 99	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 99	
gtgcag	6
<210> 100	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 100	
ttttgg	6
<210> 101	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 101	
ctcacc	6
<210> 102	
<211> 6	
<212> DNA	
<213> homo sapiens	



<400> 102 gtgcag	6
<210> 103 <211> 6 <212> DNA <213> homo sapiens	
<400> 103 ttttgg	6
<210> 104 <211> 6 <212> DNA <213> homo sapiens	
<400> 104 gagaga	6
<210> 105 <211> 22 <212> DNA <213> homo sapiens	
<400> 105 tattatgatt acgtttgggg ga	22
<210> 106 <211> 14 <212> DNA <213> homo sapiens	
<400> 106 attatcgctt cggt	14
<210> 107 <211> 6 <212> DNA <213> homo sapiens	
<400> 107 ctactt	6
<210> 108 <211> 5 <212> DNA <213> homo sapiens	
<400> 108 agaga	5
<210> 109 <211> 10 <212> DNA <213> homo sapiens	

<400> 109 acggtgacta	10
<210> 110 <211> 5 <212> DNA <213> homo sapiens	
<400> 110 cgaat	5
<210> 111 <211> 7 <212> DNA <213> homo sapiens	
<400> 111 tactact	7
<210> 112 <211> 6 <212> DNA <213> homo sapiens	
<400> 112 gagaca	6
<210> 113 <211> 18 <212> DNA <213> homo sapiens	
<400> 113 tgtatcgtat tactatgt	18
<210> 114 <211> 19 <212> DNA <213> homo sapiens	
<400> 114 ttcggggagt tattataac	19
<210> 115 <211> 6 <212> DNA <213> homo sapiens	
<400> 115 ctttga	6
<210> 116 <211> 6 <212> DNA <213> homo sapiens	
<400> 116	

ttaccc	6
<210> 117 <211> 7 <212> DNA <213> homo sapiens	
<400> 117 gctcact	7
<210> 118 <211> 6 <212> DNA <213> homo sapiens	
<400> 118 aaactc	6
<210> 119 <211> 8 <212> DNA <213> homo sapiens	
<400> 119 tcactttc	8
<210> 120 <211> 6 <212> DNA <213> homo sapiens	
<400> 120 ttaccc	6
<210> 121 <211> 6 <212> DNA <213> homo sapiens	
<400> 121 gagaga	6
<210> 122 <211> 7 <212> DNA <213> homo sapiens	
<400> 122 ggataca	7
<210> 123 <211> 9 <212> DNA <213> homo sapiens	
<400> 123 atatgctgg	9

<210> 124	
<211> 8	
<212> DNA	
<213> homo sapiens	
<400> 124	
ttactact	8
<210> 125	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 125	
cgagag	6
<210> 126	
<211> 18	
<212> DNA	
<213> homo sapiens	
<400> 126	
gggtatagca gtggctgg	18
<210> 127	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 127	
tactac	6
<210> 128	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 128	
gagaga	6
<210> 129	
<211> 18	
<212> DNA	
<213> homo sapiens	
<400> 129	
ggatacagct atggttac	18
<210> 130	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 130	
ctacta	6

<210> 131	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 131	
gagaca	6
<210> 132	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 132	
tggatc	6
<210> 133	
<211> 30	
<212> DNA	
<213> homo sapiens	
<400> 133	
gtattattat ggttcggaga cttattataa	30
<210> 134	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 134	
ctttga	6
<210> 135	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 135	
gagaca	6
<210> 136	
<211> 21	
<212> DNA	
<213> homo sapiens	
<400> 136	
gtggatgtag gggctacgat t	21
<210> 137	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 137	
ggggat	6
<210> 138	

<211> 8	
<212> DNA	
<213> homo sapiens	
<400> 138	
attactac	8
<210> 139	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 139	
gagaga	6
<210> 140	
<211> 18	
<212> DNA	
<213> homo sapiens	
<400> 140	
attactatga tagtagtg	18
<210> 141	
<211> 7	
<212> DNA	
<213> homo sapiens	
<400> 141	
attatct	7
<210> 142	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 142	
ctacta	6
<210> 143	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 143	
cgagag	6
<210> 144	
<211> 19	
<212> DNA	
<213> homo sapiens	
<400> 144	
tattactatg atagtagtg	19
<210> 145	
<211> 7	

<212> DNA	
<213> homo sapiens	
<400> 145	
attatct	7
<210> 146	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 146	
ctacta	6
<210> 147	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 147	
gagaca	6
<210> 148	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 148	
tggatc	6
<210> 149	
<211> 31	
<212> DNA	
<213> homo sapiens	
<400> 149	
gtattactat aattcgggga gttattataa c	31
<210> 150	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 150	
ctttga	6
<210> 151	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 151	
cgagag	6
<210> 152	
<211> 25	
<212> DNA	

<213> homo sapiens	
<400> 152	
atattgtagt ggtggtagct gctac	25
<210> 153	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 153	
actact	6
<210> 154	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 154	
gagagg	6
<210> 155	
<211> 20	
<212> DNA	
<213> homo sapiens	
<400> 155	
gtggatacag ctatggttac	20
<210> 156	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 156	
actact	6
<210> 157	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 157	
cgagag	6
<210> 158	
<211> 25	
<212> DNA	
<213> homo sapiens	
<400> 158	
atattgtagt ggtggtagct gctac	25
<210> 159	
<211> 6	
<212> DNA	
<213> homo sapiens	



<400> 159 actact	6
<210> 160 <211> 6 <212> DNA <213> homo sapiens	
<400> 160 cgagag	6
<210> 161 <211> 7 <212> DNA <213> homo sapiens	
<400> 161 tggtgaa	7
<210> 162 <211> 24 <212> DNA <213> homo sapiens	
<400> 162 tattactatg atggtagtgg ttat	24
<210> 163 <211> 6 <212> DNA <213> homo sapiens	
<400> 163 actact	6
<210> 164 <211> 6 <212> DNA <213> homo sapiens	
<400> 164 gcgaga	6
<210> 165 <211> 5 <212> DNA <213> homo sapiens	
<400> 165 atgag	5
<210> 166 <211> 17 <212> DNA <213> homo sapiens	

<400> 166 ggatatagtg gctacga	17
<210> 167 <211> 8 <212> DNA <213> homo sapiens	
<400> 167 attactac	8
<210> 168 <211> 6 <212> DNA <213> homo sapiens	
<400> 168 gagaca	6
<210> 169 <211> 31 <212> DNA <213> homo sapiens	
<400> 169 tatgattacg ttggaggaa ttatcggtat a	31
<210> 170 <211> 5 <212> DNA <213> homo sapiens	
<400> 170 caggg	5
<210> 171 <211> 6 <212> DNA <213> homo sapiens	
<400> 171 tggttc	6
<210> 172 <211> 6 <212> DNA <213> homo sapiens	
<400> 172 ttaccc	6
<210> 173 <211> 7 <212> DNA <213> homo sapiens	
<400> 173	

gctcact	7
<210> 174	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 174	
ttaccc	6
<210> 175	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 175	
attcac	6
<210> 176	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 176	
ttaccc	6
<210> 177	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 177	
gtggac	6
<210> 178	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 178	
ttaccc	6
<210> 179	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 179	
gtggac	6
<210> 180	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 180	
ctacaa	6

<210> 181	
<211> 14	
<212> DNA	
<213> homo sapiens	
<400> 181	
tctctcatgt gcag	14
<210> 182	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 182	
tttttg	6
<210> 183	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 183	
tgcccc	6
<210> 184	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 184	
gctcac	6
<210> 185	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 185	
tgcccc	6
<210> 186	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 186	
gtggac	6
<210> 187	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 187	
ttaccc	6

<210> 188	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 188	
gtggac	6
<210> 189	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 189	
tgcccc	6
<210> 190	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 190	
attcac	6
<210> 191	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 191	
ccctcc	6
<210> 192	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 192	
gacgtt	6
<210> 193	
<211> 6	
<212> DNA	
<213> homo sapiens	
<400> 193	
tccctc	6
<210> 194	
<211> 7	
<212> DNA	
<213> homo sapiens	
<400> 194	
ggacgtt	7
<210> 195	

<211> 6  
 <212> DNA  
 <213> homo sapiens  
  
 <400> 195  
 caaact 6  
  
 <210> 196  
 <211> 6  
 <212> DNA  
 <213> homo sapiens  
  
 <400> 196  
 atcacc 6  
  
 <210> 197  
 <211> 6  
 <212> DNA  
 <213> homo sapiens  
  
 <400> 197  
 gctcac 6  
  
 <210> 198  
 <211> 6  
 <212> DNA  
 <213> homo sapiens  
  
 <400> 198  
 attcac 6  
  
 <210> 199  
 <211> 126  
 <212> PRT  
 <213> homo sapiens  
  
 <400> 199  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Asp Val Met Ile Thr Phe Gly Gly Val Ile Val His Tyr Gly  
 100 105 110  
 Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125  
  
 <210> 200  
 <211> 125

<212> PRT

<213> homo sapiens

<400> 200

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20      25      30
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
35      40      45
Gly Trp Ile Asn Pro Asn Ser Gly Asn Thr Asp Tyr Ala Gln Lys Phe
50      55      60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65      70      75      80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Ile Tyr Tyr Cys
85      90      95
Val Arg Gly Phe Gly Tyr Ser Tyr Asn Tyr Asp Tyr Tyr Tyr Gly Met
100     105     110
Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115     120     125
```

<210> 201

<211> 126

<212> PRT

<213> homo sapiens

<400> 201

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20      25      30
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
35      40      45
Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
50      55      60
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
65      70      75      80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85      90      95
Ala Arg Glu Gly Ile Ala Val Ala Gly Thr Tyr Tyr Tyr Tyr Tyr Gly
100     105     110
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115     120     125
```

<210> 202

<211> 126

<212> PRT

<213> homo sapiens

<400> 202

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Thr Tyr
20      25      30
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
```





Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 205  
 <211> 127  
 <212> PRT  
 <213> homo sapiens

<400> 205  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Ser Gly Asp Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys  
 85 90 95  
 Ala Arg Met Arg Asp Ile Val Ala Thr Ser Tyr Tyr Tyr Tyr Phe Tyr  
 100 105 110  
 Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 206  
 <211> 117  
 <212> PRT  
 <213> homo sapiens

<400> 206  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Asp His Tyr Tyr Asp Ser Ser Asp Tyr Leu Tyr Tyr Tyr  
 100 105 110  
 Gly Leu Asp Val Trp  
 115

<210> 207  
 <211> 125  
 <212> PRT  
 <213> homo sapiens

<400> 207

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala
1			5					10					15		
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Ser	Tyr
		20					25					30			
Gly	Ile	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Met
	35					40					45				
Gly	Trp	Ile	Ser	Ala	Tyr	Asn	Gly	Asn	Thr	Asn	Tyr	Ala	Gln	Lys	Leu
	50				55			60							
Gln	Gly	Arg	Val	Thr	Met	Thr	Thr	Asp	Thr	Ser	Thr	Ser	Thr	Ala	Tyr
65				70				75					80		
Met	Glu	Leu	Arg	Ser	Leu	Arg	Ser	Asp	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
		85						90					95		
Ala	Arg	Asp	Val	Glu	Tyr	Tyr	Tyr	Asp	Gly	Ser	Gly	Tyr	Tyr	Tyr	Phe
		100					105						110		
Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser			
	115					120						125			

<210> 208

<211> 126

<212> PRT

<213> homo sapiens

<400> 208

Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Lys	Pro	Gly	Gly
1			5					10					15		
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Asn	Phe	Arg	Thr	Tyr
		20					25					30			
Asn	Met	Asn	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
	35					40					45				
Ser	Ser	Ile	Ser	Ser	Ser	Ser	Ser	Asn	Ile	Tyr	Tyr	Ala	Asp	Ser	Val
	50				55			60							
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr
65				70				75						80	
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
		85						90					95		
Ala	Arg	Asp	Ile	Met	Ile	Thr	Phe	Gly	Gly	Ile	Ile	Ala	Ser	Phe	Tyr
		100					105						110		
Phe	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser		
	115					120						125			

<210> 209

<211> 126

<212> PRT

<213> homo sapiens

<400> 209

Gln	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Val	Val	Gln	Pro	Gly	Lys
1			5					10					15		
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Ser	Tyr
		20					25					30			
Gly	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
	35					40					45				
Ala	Val	Ile	Trp	Tyr	Asp	Gly	Ser	Asn	Lys	Tyr	Tyr	Ala	Asp	Ser	Val
	50				55			60							

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
 65 70 75 80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Asp Gln Gly Tyr Arg Tyr Ala Gly Tyr Tyr Tyr Asp Tyr Gly  
 100 105 110  
 Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 210

<211> 126

<212> PRT

<213> homo sapiens

<400> 210

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr  
 20 25 30  
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ala Asp Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
 50 55 60  
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
 65 70 75 80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Asp Gln Gly Tyr Ser Tyr Gly Tyr Val Tyr Tyr Asp Tyr Gly  
 100 105 110  
 Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 211

<211> 127

<212> PRT

<213> homo sapiens

<400> 211

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
 20 25 30  
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ala Ile Ile Trp Tyr Asp Gly Asn Asp Lys Tyr Tyr Ala Asp Ser Val  
 50 55 60  
 Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
 65 70 75 80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Gly Tyr Tyr Tyr Asp Ser Ser Asp Tyr Leu Tyr Tyr Tyr  
 100 105 110  
 Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 212  
 <211> 120  
 <212> PRT  
 <213> homo sapiens

<400> 212  
 Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn  
 20 25 30  
 Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys  
 50 55 60  
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu  
 65 70 75 80  
 Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala  
 85 90 95  
 Gly Thr Val Thr Thr Asn Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln  
 100 105 110  
 Gly Thr Thr Val Thr Val Ser Ser  
 115 120

<210> 213  
 <211> 130  
 <212> PRT  
 <213> homo sapiens

<400> 213  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Glu Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20 25 30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Glu Val Gln Leu  
 50 55 60  
 Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu Ser Leu Lys Ile  
 65 70 75 80  
 Ser Cys Glu Gly Ser Gly Tyr Ser Phe Thr Ser Tyr Trp Ile Gly Trp  
 85 90 95  
 Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met Gly Ile Tyr  
 100 105 110  
 Pro Gly Asp Ser Asp Thr Arg Tyr Gly Gln Gly Thr Leu Val Thr Val  
 115 120 125  
 Ser Ser  
 130

<210> 214  
 <211> 126  
 <212> PRT  
 <213> homo sapiens

<400> 214

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Arg Phe Thr Ser Tyr  
 20 25 30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
 50 55 60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
 85 90 95  
 Ala Arg His Gly Ser Tyr Tyr Tyr Gly Ser Glu Thr Tyr Tyr Asn Val  
 100 105 110  
 Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser  
 115 120 125

<210> 215

<211> 129

<212> PRT

<213> homo sapiens

<400> 215

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20 25 30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
 50 55 60  
 Gln Gly Gln Ala Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
 85 90 95  
 Ala Arg His Val Asp Val Gly Ala Thr Ile Gly Gly Tyr Tyr Tyr  
 100 105 110  
 Tyr His Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser  
 115 120 125  
 Ser

<210> 216

<211> 126

<212> PRT

<213> homo sapiens

<400> 216

Glu Val Gln Leu Val Gln Ser Gly Thr Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Arg Phe Thr Ser Tyr  
 20 25 30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe

50		55		60	
Gln Gly Gln Val Thr	Ile Ser Ala Asp Lys	Ser Ile Ser Thr	Ala Tyr		
65	70	75	80		
Leu Gln Trp Ser Ser	Leu Lys Ala Ser Asp	Thr Ala Met Tyr	Tyr Cys		
	85	90	95		
Ala Arg His Gly	Ser Tyr Tyr Tyr Asn	Ser Gly Ser Tyr	Tyr Asn Val		
	100	105	110		
Phe Asp Tyr Trp	Gly Gln Gly Thr	Leu Val Thr Val	Ser Ser		
	115	120	125		

<210> 217

<211> 126

<212> PRT

<213> homo sapiens

<400> 217

Glu Val Gln Leu Val	Gln Ser Gly Ala Glu	Val Lys Lys Pro	Gly Glu
1	5	10	15
Ser Leu Lys Ile	Ser Cys Lys Gly Ser	Gly Tyr Ser Phe	Thr Ser Tyr
	20	25	30
Trp Ile Gly Trp	Val Arg Gln Met Pro	Gly Lys Gly Leu	Glu Trp Met
	35	40	45
Gly Ile Ile Tyr	Pro Gly Asp Ser Asp	Ala Lys Tyr Ser	Pro Ser Phe
	50	55	60
Gln Gly Gln Val	Thr Ile Ser Ala Asp	Lys Ser Ile Ser	Thr Ala Tyr
	65	70	75
Leu Gln Trp Ser	Ser Ser Leu Lys Ala Ser	Asp Thr Ala Met	Tyr Tyr Cys
	85	90	95
Ala Arg His Tyr	Asp Tyr Val Trp Arg	Asn Tyr Arg Tyr	Thr Gly Trp
	100	105	110
Phe Asp Pro Trp	Gly Gln Gly Thr	Leu Val Thr Val	Ser Ser
	115	120	125

<210> 218

<211> 107

<212> PRT

<213> homo sapiens

<400> 218

Asp Ile Gln Met Thr	Gln Ser Pro Ser	Ser Val Ser Ala	Ser Val Gly
1	5	10	15
Asp Arg Val Thr	Ile Thr Cys Arg Ala	Ser Gln Gly Ile	Ser Ser Trp
	20	25	30
Leu Ala Trp Tyr	Gln Gln Lys Pro	Gly Lys Ala Pro	Lys Leu Leu Ile
	35	40	45
Tyr Ala Ala Ser	Ile Leu Gln Ser	Gly Val Pro Ser	Arg Phe Ser Gly
	50	55	60
Ser Gly Ser Gly	Thr Asp Phe Thr	Leu Thr Ile Ser	Ser Leu Gln Pro
	65	70	75
Glu Asp Phe Ala	Ser Tyr Tyr Cys Gln	Gln Ser Asn Ser	Phe Pro Arg
	85	90	95
Thr Phe Gly Gln	Gly Thr Lys Val	Glu Ile Lys	
	100	105	

<210> 219  
 <211> 111  
 <212> PRT  
 <213> homo sapiens

<400> 219  
 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
 1 5 10 15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
 20 25 30  
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Leu Lys Pro Gly Gln Ser  
 35 40 45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Ser Arg Ala Ser Gly Val Pro  
 50 55 60  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
 65 70 75 80  
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Thr  
 85 90 95  
 Leu Gln Thr Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys  
 100 105 110

<210> 220  
 <211> 111  
 <212> PRT  
 <213> homo sapiens

<400> 220  
 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
 1 5 10 15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Gln Ser  
 20 25 30  
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
 35 40 45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro  
 50 55 60  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
 65 70 75 80  
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala  
 85 90 95  
 Leu Gln Thr Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys  
 100 105 110

<210> 221  
 <211> 113  
 <212> PRT  
 <213> homo sapiens

<400> 221  
 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
 1 5 10 15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
 20 25 30  
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
 35 40 45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro





<212> PRT  
 <213> homo sapiens

<400> 224  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr  
 20 25 30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Asn Leu Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Ser Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Val Ala Ala Tyr Tyr Cys Gln Lys Cys Asn Ser Ala Pro Trp  
 85 90 95  
 Thr Phe Gly Gln Gly Thr Thr Val Glu Ile Lys  
 100 105

<210> 225  
 <211> 108  
 <212> PRT  
 <213> homo sapiens

<400> 225  
 Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser  
 20 25 30  
 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
 35 40 45  
 Ile Tyr Ala Thr Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu  
 65 70 75 80  
 Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro  
 85 90 95  
 Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys  
 100 105

<210> 226  
 <211> 108  
 <212> PRT  
 <213> homo sapiens

<400> 226  
 Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser  
 20 25 30  
 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
 35 40 45  
 Ile Tyr Gly Ala Ser Asn Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu

65                      70                      75                      80  
 Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Leu  
                                  85                      90                      95  
 Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys  
                                  100                      105

<210> 227  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 227  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
   1                                 5                                 10                                 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
                                  20                                 25                                 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
                                  35                                 40                                 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
                                  50                                 55                                 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65                                 70                                 75                                 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Asp Pro Cys  
                                  85                                 90                                 95  
 Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Arg  
                                  100                                 105

<210> 228  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 228  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
   1                                 5                                 10                                 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
                                  20                                 25                                 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
                                  35                                 40                                 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
                                  50                                 55                                 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65                                 70                                 75                                 80  
 Glu Asp Phe Ala Thr Tyr Phe Cys Leu Gln His Asn Ser Tyr Phe  
                                  85                                 90                                 95  
 Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys  
                                  100                                 105

<210> 229  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 229

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu  
 85 90 95  
 Thr Phe Gly Gly Thr Lys Val Glu Ile Lys  
 100 105

<210> 230  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 230  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Arg Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp  
 85 90 95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
 100 105

<210> 231  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 231  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp  
 85 90 95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys

<210> 232  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 232  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp  
 85 90 95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
 100 105

<210> 233  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 233  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu  
 85 90 95  
 Thr Phe Gly Gly Thr Lys Val Glu Ile Lys  
 100 105

<210> 234  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 234  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30

Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
           35                  40                  45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
           50                  55                  60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65                  70                  75  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp  
                   85                  90                  95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
                   100                  105

<210> 235

<211> 107

<212> PRT

<213> homo sapiens

<400> 235

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1                  5                  10                  15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
           20                  25                  30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
           35                  40                  45  
 Phe Ala Ala Ser Ser Leu Pro Ser Gly Val Pro Ser Arg Phe Ser Gly  
           50                  55                  60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65                  70                  75                  80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Ser Gly Tyr Pro Pro  
                   85                  90                  95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
                   100                  105

<210> 236

<211> 126

<212> PRT

<213> homo sapiens

<400> 236

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1                  5                  10                  15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
           20                  25                  30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
           35                  40                  45  
 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
           50                  55                  60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65                  70                  75                  80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
                   85                  90                  95  
 Ala Arg Asp Val Met Ile Thr Phe Gly Gly Val Ile Val His Tyr Gly  
           100                  105                  110  
 Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
           115                  120                  125

<210> 237  
 <211> 125  
 <212> PRT  
 <213> homo sapiens

<400> 237  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Ile Asn Pro Asn Ser Gly Asn Thr Asp Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Ile Tyr Tyr Cys  
 85 90 95  
 Val Arg Gly Phe Gly Tyr Ser Tyr Asn Tyr Asp Tyr Tyr Tyr Gly Met  
 100 105 110  
 Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 238  
 <211> 125  
 <212> PRT  
 <213> homo sapiens

<400> 238  
 Gln Val Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser  
 1 5 10 15  
 Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Asp  
 20 25 30  
 Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met Gly  
 35 40 45  
 Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe Gln  
 50 55 60  
 Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr Met  
 65 70 75 80  
 Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala  
 85 90 95  
 Arg Glu Gly Ile Ala Val Ala Gly Thr Tyr Tyr Tyr Tyr Gly Met  
 100 105 110  
 Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 239  
 <211> 126  
 <212> PRT  
 <213> homo sapiens

<400> 239  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Thr Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Leu Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Asp Ile Val Val Val Val Ala Ala Thr Asn Tyr Tyr Asn Gly  
 100 105 110  
 Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 240

<211> 125

<212> PRT

<213> homo sapiens

<400> 240

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Gly Ser Gly Tyr Ser Tyr Gly Tyr Asp Tyr Tyr Gly Met  
 100 105 110  
 Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 241

<211> 126

<212> PRT

<213> homo sapiens

<400> 241

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys





<212> PRT

<213> homo sapiens

<400> 244

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
20 25 30  
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  
35 40 45  
Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Gln Gly Thr Leu  
50 55 60  
Val Thr Val Ser Ser  
65

<210> 245

<211> 126

<212> PRT

<213> homo sapiens

<400> 245

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Lys  
1 5 10 15  
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Glu Thr Phe Ser Ser Tyr  
20 25 30  
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
35 40 45  
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
50 55 60  
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
65 70 75 80  
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Arg Asp Gln Gly Tyr Arg Tyr Ala Gly Tyr Tyr Tyr Asp Tyr Gly  
100 105 110  
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
115 120 125

<210> 246

<211> 126

<212> PRT

<213> homo sapiens

<400> 246

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg  
1 5 10 15  
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr  
20 25 30  
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
35 40 45  
Ala Asp Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
50 55 60  
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
65 70 75 80  
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys



<212> PRT  
 <213> homo sapiens

<400> 249  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Arg Phe Thr Ser Tyr  
 20 25 30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
 50 55 60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
 85 90 95  
 Ala Arg His Gly Ser Tyr Tyr Tyr Gly Ser Glu Thr Tyr Tyr Asn Val  
 100 105 110  
 Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser  
 115 120 125

<210> 250  
 <211> 129  
 <212> PRT  
 <213> homo sapiens

<400> 250  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20 25 30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
 50 55 60  
 Gln Gly Gln Ala Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
 85 90 95  
 Ala Arg His Val Asp Val Gly Ala Thr Ile Gly Gly Tyr Tyr Tyr Tyr  
 100 105 110  
 Tyr His Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser  
 115 120 125  
 Ser

<210> 251  
 <211> 126  
 <212> PRT  
 <213> homo sapiens

<400> 251  
 Glu Val Gln Leu Val Gln Ser Gly Thr Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Arg Phe Thr Ser Tyr



Leu Gln Thr Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys  
 100 105 110

<210> 254  
 <211> 111  
 <212> PRT  
 <213> homo sapiens

<400> 254  
 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
 1 5 10 15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Gln Ser  
 20 25 30  
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
 35 40 45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro  
 50 55 60  
 Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
 65 70 75 80  
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala  
 85 90 95  
 Leu Gln Thr Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys  
 100 105 110

<210> 255  
 <211> 113  
 <212> PRT  
 <213> homo sapiens

<400> 255  
 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
 1 5 10 15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
 20 25 30  
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
 35 40 45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro  
 50 55 60  
 Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
 65 70 75 80  
 Ser Arg Val Glu Ala Asp Asp Val Gly Val Tyr Tyr Cys Met Gln Ala  
 85 90 95  
 Leu Gln Ser Leu Met Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile  
 100 105 110

Lys

<210> 256  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 256  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly

```

      1           5           10           15
Asp Arg Val Thr Ile Asn Cys Arg Ala Ser Gln Gly Ile Ser Asn Asp
      20           25           30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
      35           40           45
Tyr Ala Ala Ser Thr Leu Gln Leu Gly Val Pro Ser Arg Phe Ser Gly
      50           55           60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
      65           70           75           80
Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Phe
      85           90           95
Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
      100           105

```

```

<210> 257
<211> 107
<212> PRT
<213> homo sapiens

```

```

<400> 257
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
      1           5           10           15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr
      20           25           30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
      35           40           45
Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
      50           55           60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
      65           70           75           80
Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Leu
      85           90           95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
      100           105

```

```

<210> 258
<211> 107
<212> PRT
<213> homo sapiens

```

```

<400> 258
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
      1           5           10           15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr
      20           25           30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Asn Leu Leu Ile
      35           40           45
Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
      50           55           60
Ser Gly Ser Gly Thr Asp Phe Ser Leu Thr Ile Ser Ser Leu Gln Pro
      65           70           75           80
Glu Asp Val Ala Ala Tyr Tyr Cys Gln Lys Cys Asn Ser Ala Pro Trp
      85           90           95
Thr Phe Gly Gln Gly Thr Thr Val Glu Ile Lys
      100           105

```

<210> 259  
 <211> 108  
 <212> PRT  
 <213> homo sapiens

<400> 259  
 Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser  
 20 25 30  
 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
 35 40 45  
 Ile Tyr Ala Thr Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu  
 65 70 75 80  
 Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro  
 85 90 95  
 Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys  
 100 105

<210> 260  
 <211> 108  
 <212> PRT  
 <213> homo sapiens

<400> 260  
 Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser  
 20 25 30  
 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
 35 40 45  
 Ile Tyr Gly Ala Ser Asn Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu  
 65 70 75 80  
 Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Leu  
 85 90 95  
 Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys  
 100 105

<210> 261  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 261  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile





<212> PRT  
 <213> homo sapiens

<400> 264  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Arg Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp  
 85 90 95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
 100 105

<210> 265  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 265  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp  
 85 90 95  
 Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys  
 100 105

<210> 266  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 266  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro



Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Phe Ala Ala Ser Ser Leu Pro Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Ser Gly Tyr Pro Pro  
 85 90 95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
 100 105

<210> 270

<211> 126

<212> PRT

<213> homo sapiens

<400> 270

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Phe Arg Thr Tyr  
 20 25 30  
 Asn Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ser Ser Ile Ser Ser Ser Ser Ser Asn Ile Tyr Tyr Ala Asp Ser Val  
 50 55 60  
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr  
 65 70 75 80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Asp Ile Met Ile Thr Phe Gly Gly Ile Ile Ala Ser Phe Tyr  
 100 105 110  
 Phe Asp Tyr Trp Gly Gln Gly Thr Val Leu Thr Val Ser Ser  
 115 120 125

<210> 271

<211> 98

<212> PRT

<213> homo sapiens

<400> 271

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
 20 25 30  
 Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ser Ser Ile Ser Ser Ser Ser Ser Tyr Ile Tyr Tyr Ala Asp Ser Val  
 50 55 60  
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr  
 65 70 75 80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

Ala Arg

85 90 95

<210> 272  
 <211> 98  
 <212> PRT  
 <213> homo sapiens

<220>  
 <221> VARIANT  
 <222> 28, 30, 33, 57  
 <223> Xaa = Any Amino Acid

<221> VARIANT  
 <222> 28, 30, 33, 57  
 <223> Xaa = Any Amino Acid

<400> 272  
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Xaa Phe Xaa Ser Tyr  
 20 25 30  
 Xaa Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ser Ser Ile Ser Ser Ser Ser Ser Xaa Ile Tyr Tyr Ala Asp Ser Val  
 50 55 60  
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr  
 65 70 75 80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 273  
 <211> 108  
 <212> PRT  
 <213> homo sapiens

<400> 273  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asp Asn  
 20 25 30  
 Asp Leu Gly Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu  
 35 40 45  
 Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln  
 65 70 75 80  
 Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro  
 85 90 95  
 Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys  
 100 105

<210> 274  
 <211> 96  
 <212> PRT  
 <213> homo sapiens

<400> 274  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asp Asn  
 20 25 30  
 Asp Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu  
 35 40 45  
 Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln  
 65 70 75 80  
 Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro  
 85 90 95

<210> 275  
 <211> 96  
 <212> PRT  
 <213> homo sapiens

<400> 275  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asp Asn  
 20 25 30  
 Asp Leu Gly Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu  
 35 40 45  
 Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln  
 65 70 75 80  
 Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro  
 85 90 95

<210> 276  
 <211> 120  
 <212> PRT  
 <213> homo sapiens

<400> 276  
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn  
 20 25 30  
 Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys  
 50 55 60  
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu  
 65 70 75 80

Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala  
85 90 95  
Gly Thr Val Thr Thr Asn Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln  
100 105 110  
Gly Thr Thr Val Thr Val Ser Ser  
115 120

<210> 277  
<211> 97  
<212> PRT  
<213> homo sapiens

<400> 277  
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly  
1 5 10 15  
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn  
20 25 30  
Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
35 40 45  
Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys  
50 55 60  
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu  
65 70 75 80  
Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala  
85 90 95

Arg

<210> 278  
<211> 96  
<212> PRT  
<213> homo sapiens

<400> 278  
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly  
1 5 10 15  
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn  
20 25 30  
Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
35 40 45  
Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys  
50 55 60  
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu  
65 70 75 80  
Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala  
85 90 95

<210> 279  
<211> 111  
<212> PRT  
<213> homo sapiens

<400> 279  
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly

```

      1           5           10           15
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Leu Leu Gln Ser
      20           25           30
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
      35           40           45
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
      50           55           60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
      65           70           75           80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
      85           90           95
Leu Gln Thr Leu Thr Phe Gly Gly Thr Lys Val Glu Ile Lys
      100           105           110

```

<210> 280

<211> 100

<212> PRT

<213> homo sapiens

<400> 280

```

Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
      1           5           10           15
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
      20           25           30
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
      35           40           45
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
      50           55           60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
      65           70           75           80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
      85           90           95
Leu Gln Thr Pro
      100

```

<210> 281

<211> 99

<212> PRT

<213> homo sapiens

<220>

<221> VARIANT

<222> 31

<223> Xaa = Any Amino Acid

<221> VARIANT

<222> 31

<223> Xaa = Any Amino Acid

<400> 281

```

Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
      1           5           10           15
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Xaa Ser
      20           25           30
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser

```

```

          35              40              45
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
  50          55          60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
  65          70          75          80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
          85          90          95
Leu Gln Thr

```

```

<210> 282
<211> 126
<212> PRT
<213> homo sapiens

```

```

<400> 282
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Lys
  1          5          10          15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
  20          25          30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
  35          40          45
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
  50          55          60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
  65          70          75          80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
  85          90          95
Ala Arg Asp Gln Gly Tyr Arg Tyr Ala Gly Tyr Tyr Tyr Asp Tyr Gly
  100          105          110
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
  115          120          125

```

```

<210> 283
<211> 98
<212> PRT
<213> homo sapiens

```

```

<400> 283
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
  1          5          10          15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
  20          25          30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
  35          40          45
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
  50          55          60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
  65          70          75          80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
  85          90          95
Ala Arg

```



<210> 284  
 <211> 98  
 <212> PRT  
 <213> homo sapiens

<400> 284  
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Lys  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
 20 25 30  
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
 50 55 60  
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
 65 70 75 80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 285  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 285  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu  
 85 90 95  
 Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys  
 100 105

<210> 286  
 <211> 95  
 <212> PRT  
 <213> homo sapiens

<400> 286  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly

50                      55                      60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65                      70                      75                      80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro  
                     85                      90                      95

<210> 287  
 <211> 95  
 <212> PRT  
 <213> homo sapiens

<400> 287  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1                      5                      10                      15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
                     20                      25                      30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
                     35                      40                      45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50                      55                      60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65                      70                      75                      80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro  
                     85                      90                      95

<210> 288  
 <211> 126  
 <212> PRT  
 <213> homo sapiens

<400> 288  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1                      5                      10                      15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
                     20                      25                      30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
                     35                      40                      45  
 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50                      55                      60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65                      70                      75                      80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
                     85                      90                      95  
 Ala Arg Glu Gly Ile Ala Val Ala Gly Thr Tyr Tyr Tyr Tyr Tyr Gly  
                     100                      105                      110  
 Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
                     115                      120                      125

<210> 289  
 <211> 98  
 <212> PRT  
 <213> homo sapiens

<400> 289

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 290  
 <211> 98  
 <212> PRT  
 <213> homo sapiens

<400> 290  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 291  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 291  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Phe Cys Leu Gln His Asn Ser Tyr Pro Phe  
 85 90 95  
 Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys

<210> 292  
 <211> 95  
 <212> PRT  
 <213> homo sapiens

<400> 292  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro  
 85 90 95

<210> 293  
 <211> 95  
 <212> PRT  
 <213> homo sapiens

<400> 293  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Phe Cys Leu Gln His Asn Ser Tyr Pro  
 85 90 95

<210> 294  
 <211> 126  
 <212> PRT  
 <213> homo sapiens

<400> 294  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Arg Asp Val Met Ile Thr Phe Gly Gly Val Ile Val His Tyr Gly  
100 105 110  
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
115 120 125

<210> 295

<211> 98

<212> PRT

<213> homo sapiens

<400> 295

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
20 25 30  
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
35 40 45  
Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Arg

<210> 296

<211> 98

<212> PRT

<213> homo sapiens

<400> 296

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
20 25 30  
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
35 40 45  
Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Arg

<210> 297

<211> 107

<212> PRT

<213> homo sapiens

<400> 297

```
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1           5           10           15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
20           25           30
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
35           40           45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50           55           60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65           70           75           80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Asp Pro Cys
85           90           95
Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Arg
100          105
```

<210> 298

<211> 95

<212> PRT

<213> homo sapiens

<400> 298

```
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1           5           10           15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
20           25           30
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
35           40           45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50           55           60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65           70           75           80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro
85           90           95
```

<210> 299

<211> 95

<212> PRT

<213> homo sapiens

<220>

<221> VARIANT

<222> 94

<223> Xaa = Any Amino Acid

<221> VARIANT

<222> 94

<223> Xaa = Any Amino Acid

<400> 299

```
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1           5           10           15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
```



<210> 302  
 <211> 98  
 <212> PRT  
 <213> homo sapiens

<220>  
 <221> VARIANT  
 <222> 23  
 <223> Xaa = Any Amino Acid

<221> VARIANT  
 <222> 23  
 <223> Xaa = Any Amino Acid

<400> 302  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Xaa Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20 25 30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
 50 55 60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 303  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 303  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Arg Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp  
 85 90 95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
 100 105

<210> 304  
 <211> 95  
 <212> PRT  
 <213> homo sapiens



<400> 304  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro  
 85 90 95

<210> 305  
 <211> 95  
 <212> PRT  
 <213> homo sapiens

<220>  
 <221> VARIANT  
 <222> 56  
 <223> Xaa = Any Amino Acid

<221> VARIANT  
 <222> 56  
 <223> Xaa = Any Amino Acid

<400> 305  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Xaa Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro  
 85 90 95

<210> 306  
 <211> 126  
 <212> PRT  
 <213> homo sapiens

<400> 306  
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr  
 20 25 30  
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45

Ala Asp Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
50 55 60  
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
65 70 75 80  
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Arg Asp Gln Gly Tyr Ser Tyr Gly Tyr Val Tyr Tyr Asp Tyr Gly  
100 105 110  
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
115 120 125

<210> 307  
<211> 98  
<212> PRT  
<213> homo sapiens

<400> 307  
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg  
1 5 10 15  
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
20 25 30  
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
35 40 45  
Ala Asp Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
50 55 60  
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
65 70 75 80  
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Arg

<210> 308  
<211> 98  
<212> PRT  
<213> homo sapiens

<400> 308  
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg  
1 5 10 15  
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr  
20 25 30  
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
35 40 45  
Ala Asp Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
50 55 60  
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
65 70 75 80  
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Arg

<210> 309

<211> 107

<212> PRT

<213> homo sapiens

<400> 309

```
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1           5           10           15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asp Asn
          20           25           30
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
          35           40           45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
          50           55           60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
          65           70           75           80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
          85           90           95
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
          100           105
```

<210> 310

<211> 95

<212> PRT

<213> homo sapiens

<400> 310

```
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1           5           10           15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asp Asn
          20           25           30
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
          35           40           45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
          50           55           60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
          65           70           75           80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro
          85           90           95
```

<210> 311

<211> 95

<212> PRT

<213> homo sapiens

<400> 311

```
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1           5           10           15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asp Asn
          20           25           30
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
          35           40           45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
          50           55           60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
          65           70           75           80
```

Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro  
85 90 95

<210> 312  
<211> 98  
<212> PRT  
<213> homo sapiens

<400> 312  
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
1 5 10 15  
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
20 25 30  
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
50 55 60  
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
85 90 95  
Ala Arg

<210> 313  
<211> 126  
<212> PRT  
<213> homo sapiens

<400> 313  
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
1 5 10 15  
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
20 25 30  
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
50 55 60  
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
85 90 95  
Ala Arg His Gly Ser Tyr Tyr Tyr Gly Ser Glu Thr Tyr Tyr Asn Val  
100 105 110  
Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser  
115 120 125

<210> 314  
<211> 98  
<212> PRT  
<213> homo sapiens

<220>  
<221> VARIANT

<222> 28  
<223> Xaa = Any Amino Acid

<221> VARIANT  
<222> 28  
<223> Xaa = Any Amino Acid

<400> 314  
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
1 5 10 15  
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Xaa Phe Thr Ser Tyr  
20 25 30  
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
50 55 60  
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
85 90 95  
Ala Arg

<210> 315  
<211> 95  
<212> PRT  
<213> homo sapiens

<400> 315  
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
20 25 30  
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
35 40 45  
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
50 55 60  
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
65 70 75 80  
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro  
85 90 95

<210> 316  
<211> 107  
<212> PRT  
<213> homo sapiens

<400> 316  
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
20 25 30  
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
35 40 45  
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly



Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20 25 30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
 50 55 60  
 Gln Gly Gln Ala Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
 85 90 95  
 Ala Arg His Val Asp Val Gly Ala Thr Ile Gly Gly Tyr Tyr Tyr  
 100 105 110  
 Tyr His Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser  
 115 120 125  
 Ser

<210> 320  
 <211> 98  
 <212> PRT  
 <213> homo sapiens

<220>  
 <221> VARIANT  
 <222> 68  
 <223> Xaa = Any Amino Acid

<221> VARIANT  
 <222> 68  
 <223> Xaa = Any Amino Acid

<400> 320  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20 25 30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
 50 55 60  
 Gln Gly Gln Xaa Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 321  
 <211> 100  
 <212> PRT  
 <213> homo sapiens

<400> 321

Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
 1 5 10 15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
 20 25 30  
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
 35 40 45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro  
 50 55 60  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
 65 70 75 80  
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala  
 85 90 95  
 Leu Gln Thr Pro  
 100

<210> 322

<211> 114

<212> PRT

<213> homo sapiens

<400> 322

Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
 1 5 10 15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
 20 25 30  
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
 35 40 45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro  
 50 55 60  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
 65 70 75 80  
 Ser Arg Val Glu Ala Asp Asp Val Gly Val Tyr Tyr Cys Met Gln Ala  
 85 90 95  
 Leu Gln Thr Pro Leu Met Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu  
 100 105 110  
 Ile Lys

<210> 323

<211> 99

<212> PRT

<213> homo sapiens

<400> 323

Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
 1 5 10 15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
 20 25 30  
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
 35 40 45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro  
 50 55 60  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
 65 70 75 80  
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala





Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 327  
 <211> 96  
 <212> PRT  
 <213> homo sapiens

<400> 327  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Phe Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn  
 20 25 30  
 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu  
 35 40 45  
 Ile Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln  
 65 70 75 80  
 Pro Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro  
 85 90 95

<210> 328  
 <211> 108  
 <212> PRT  
 <213> homo sapiens

<400> 328  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Phe Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn  
 20 25 30  
 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu  
 35 40 45  
 Ile Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln  
 65 70 75 80  
 Pro Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro  
 85 90 95  
 Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys  
 100 105

<210> 329  
 <211> 96  
 <212> PRT  
 <213> homo sapiens

<400> 329  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Phe Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn  
 20 25 30  
 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu  
 35 40 45  
 Ile Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln  
 65 70 75 80  
 Pro Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro  
 85 90 95

<210> 330  
 <211> 98  
 <212> PRT  
 <213> homo sapiens

<400> 330  
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
 20 25 30  
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
 50 55 60  
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
 65 70 75 80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 331  
 <211> 127  
 <212> PRT  
 <213> homo sapiens

<400> 331  
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
 20 25 30  
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ala Ile Ile Trp Tyr Asp Gly Asn Asp Lys Tyr Tyr Ala Asp Ser Val  
 50 55 60

Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
 65 70 75 80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Gly Tyr Tyr Asp Ser Ser Asp Tyr Leu Tyr Tyr Tyr Tyr  
 100 105 110  
 Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 332

<211> 98

<212> PRT

<213> homo sapiens

<220>

<221> VARIANT

<222> 56, 57

<223> Xaa = Any Amino Acid

<221> VARIANT

<222> 56, 57

<223> Xaa = Any Amino Acid

<400> 332

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
 20 25 30  
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ala Ile Ile Trp Tyr Asp Gly Xaa Xaa Lys Tyr Tyr Ala Asp Ser Val  
 50 55 60  
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
 65 70 75 80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 333

<211> 95

<212> PRT

<213> homo sapiens

<400> 333

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr  
 20 25 30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro  
85 90 95

<210> 334  
<211> 107  
<212> PRT  
<213> homo sapiens

<400> 334  
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr  
20 25 30  
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Asn Leu Leu Ile  
35 40 45  
Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
50 55 60  
Ser Gly Ser Gly Thr Asp Phe Ser Leu Thr Ile Ser Ser Leu Gln Pro  
65 70 75 80  
Glu Asp Val Ala Ala Tyr Tyr Cys Gln Lys Cys Asn Ser Ala Pro Trp  
85 90 95  
Thr Phe Gly Gln Gly Thr Thr Val Glu Ile Lys  
100 105

<210> 335  
<211> 95  
<212> PRT  
<213> homo sapiens

<220>  
<221> VARIANT  
<222> 45, 85, 91  
<223> Xaa = Any Amino Acid

<221> VARIANT  
<222> 45, 85, 91  
<223> Xaa = Any Amino Acid

<400> 335  
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr  
20 25 30  
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Xaa Leu Leu Ile  
35 40 45  
Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
50 55 60  
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
65 70 75 80  
Glu Asp Val Ala Xaa Tyr Tyr Cys Gln Lys Xaa Asn Ser Ala Pro  
85 90 95

<210> 336  
<211> 98

<212> PRT

<213> homo sapiens

<400> 336

Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Glu
1				5					10					15	
Ser	Leu	Lys	Ile	Ser	Cys	Lys	Gly	Ser	Gly	Tyr	Ser	Phe	Thr	Ser	Tyr
			20					25					30		
Trp	Ile	Gly	Trp	Val	Arg	Gln	Met	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
		35					40					45			
Gly	Ile	Ile	Tyr	Pro	Gly	Asp	Ser	Asp	Thr	Arg	Tyr	Ser	Pro	Ser	Phe
		50				55					60				
Gln	Gly	Gln	Val	Thr	Ile	Ser	Ala	Asp	Lys	Ser	Ile	Ser	Thr	Ala	Tyr
65				70					75					80	
Leu	Gln	Trp	Ser	Ser	Leu	Lys	Ala	Ser	Asp	Thr	Ala	Met	Tyr	Tyr	Cys
				85					90					95	

Ala Arg

<210> 337

<211> 126

<212> PRT

<213> homo sapiens

<400> 337

Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Thr	Glu	Val	Lys	Lys	Pro	Gly	Glu
1				5					10					15	
Ser	Leu	Lys	Ile	Ser	Cys	Lys	Gly	Ser	Gly	Tyr	Arg	Phe	Thr	Ser	Tyr
			20					25					30		
Trp	Ile	Gly	Trp	Val	Arg	Gln	Met	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
		35					40					45			
Gly	Ile	Ile	Tyr	Pro	Gly	Asp	Ser	Asp	Thr	Arg	Tyr	Ser	Pro	Ser	Phe
		50				55					60				
Gln	Gly	Gln	Val	Thr	Ile	Ser	Ala	Asp	Lys	Ser	Ile	Ser	Thr	Ala	Tyr
65				70					75					80	
Leu	Gln	Trp	Ser	Ser	Leu	Lys	Ala	Ser	Asp	Thr	Ala	Met	Tyr	Tyr	Cys
				85					90					95	
Ala	Arg	His	Gly	Ser	Tyr	Tyr	Tyr	Asn	Ser	Gly	Ser	Tyr	Tyr	Asn	Val
			100					105					110		
Phe	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser		
			115				120						125		

<210> 338

<211> 98

<212> PRT

<213> homo sapiens

<220>

<221> VARIANT

<222> 9, 28

<223> Xaa = Any Amino Acid

<221> VARIANT

<222> 9, 28

<223> Xaa = Any Amino Acid

<400> 338

Glu Val Gln Leu Val Gln Ser Gly Xaa Glu Val Lys Lys Pro Gly Glu  
1 5 10 15  
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Xaa Phe Thr Ser Tyr  
20 25 30  
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
50 55 60  
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
85 90 95  
Ala Arg

<210> 339

<211> 95

<212> PRT

<213> homo sapiens

<400> 339

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
20 25 30  
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
35 40 45  
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
50 55 60  
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
65 70 75 80  
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro  
85 90 95

<210> 340

<211> 107

<212> PRT

<213> homo sapiens

<400> 340

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
20 25 30  
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
35 40 45  
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
50 55 60  
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
65 70 75 80  
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp  
85 90 95  
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys

<210> 341  
 <211> 95  
 <212> PRT  
 <213> homo sapiens

<400> 341  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro  
 85 90 95

<210> 342  
 <211> 98  
 <212> PRT  
 <213> homo sapiens

<400> 342  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 343  
 <211> 125  
 <212> PRT  
 <213> homo sapiens

<400> 343  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45



Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Gly Ser Gly Tyr Ser Tyr Gly Tyr Asp Tyr Tyr Tyr Gly Met  
 100 105 110  
 Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 344  
 <211> 98  
 <212> PRT  
 <213> homo sapiens

<400> 344  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 345  
 <211> 95  
 <212> PRT  
 <213> homo sapiens

<400> 345  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr  
 20 25 30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro  
 85 90 95

<210> 346  
 <211> 107  
 <212> PRT

<213> homo sapiens

<400> 346

```
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1           5           10           15
Asp Arg Val Thr Ile Asn Cys Arg Ala Ser Gln Gly Ile Ser Asn Asp
          20           25           30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
          35           40           45
Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
          50           55           60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65          70          75          80
Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Phe
          85          90          95
Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
          100          105
```

<210> 347

<211> 95

<212> PRT

<213> homo sapiens

<220>

<221> VARIANT

<222> 22, 32, 56

<223> Xaa = Any Amino Acid

<221> VARIANT

<222> 22, 32, 56

<223> Xaa = Any Amino Acid

<400> 347

```
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1           5           10           15
Asp Arg Val Thr Ile Xaa Cys Arg Ala Ser Gln Gly Ile Ser Asn Xaa
          20           25           30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
          35           40           45
Tyr Ala Ala Ser Thr Leu Gln Xaa Gly Val Pro Ser Arg Phe Ser Gly
          50           55           60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65          70          75          80
Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro
          85          90          95
```

<210> 348

<211> 98

<212> PRT

<213> homo sapiens

<400> 348

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1           5           10           15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
```

20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 349  
 <211> 126  
 <212> PRT  
 <213> homo sapiens

<400> 349  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Asn Gly Asn Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Asp Ile Val Val Val Val Thr Ala Thr Asp Tyr Tyr Tyr Gly  
 100 105 110  
 Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 350  
 <211> 98  
 <212> PRT  
 <213> homo sapiens

<220>  
 <221> VARIANT  
 <222> 55  
 <223> Xaa = Any Amino Acid

<221> VARIANT  
 <222> 55  
 <223> Xaa = Any Amino Acid

<400> 350  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met

	35						40					45							
Gly	Trp	Met	Asn	Pro	Asn	Xaa	Gly	Asn	Thr	Gly	Tyr	Ala	Gln	Lys	Phe				
50						55				60									
Gln	Gly	Arg	Val	Thr	Met	Thr	Arg	Asn	Thr	Ser	Ile	Ser	Thr	Ala	Tyr				
65					70					75					80				
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys				
			85					90					95						
Ala	Arg																		

<210> 351  
 <211> 95  
 <212> PRT  
 <213> homo sapiens

<400> 351																			
Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly				
1				5					10					15					
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Arg	Asn	Asp				
		20						25					30						
Leu	Gly	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Arg	Leu	Ile				
		35				40						45							
Tyr	Ala	Ala	Ser	Ser	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly				
		50			55					60									
Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro				
65					70					75				80					
Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Leu	Gln	His	Asn	Ser	Tyr	Pro					
				85					90					95					

<210> 352  
 <211> 107  
 <212> PRT  
 <213> homo sapiens

<400> 352																			
Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly				
1				5					10					15					
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Arg	Asn	Asp				
		20						25					30						
Leu	Gly	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Arg	Leu	Ile				
		35				40						45							
Phe	Ala	Ala	Ser	Ser	Leu	Pro	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly				
		50			55					60									
Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro				
65					70					75				80					
Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Leu	Gln	His	Ser	Gly	Tyr	Pro	Pro				
				85					90					95					
Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys									
			100					105											

<210> 353  
 <211> 95  
 <212> PRT  
 <213> homo sapiens

<220>  
 <221> VARIANT  
 <222> 55, 92, 93  
 <223> Xaa = Any Amino Acid

<221> VARIANT  
 <222> 55, 92, 93  
 <223> Xaa = Any Amino Acid

<400> 353  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Xaa Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Xaa Xaa Tyr Pro  
 85 90 95

<210> 354  
 <211> 126  
 <212> PRT  
 <213> homo sapiens

<400> 354  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Asp Val Glu Tyr Tyr Tyr Asp Gly Ser Gly Tyr Tyr Tyr Tyr  
 100 105 110  
 Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser  
 115 120 125

<210> 355  
 <211> 98  
 <212> PRT  
 <213> homo sapiens

<400> 355  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
                   20                  25                  30  
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  
                   35                  40                  45  
 Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu  
                   50                  55                  60  
 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  
                   65                  70                  75                  80  
 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
                   85                  90                  95  
 Ala Arg

<210> 356  
 <211> 98  
 <212> PRT  
 <213> homo sapiens

<400> 356  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
                   1                  5                  10                  15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
                   20                  25                  30  
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  
                   35                  40                  45  
 Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu  
                   50                  55                  60  
 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  
                   65                  70                  75                  80  
 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
                   85                  90                  95  
 Ala Arg

<210> 357  
 <211> 108  
 <212> PRT  
 <213> homo sapiens

<400> 357  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly  
                   1                  5                  10                  15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp  
                   20                  25                  30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
                   35                  40                  45  
 Tyr Ala Ala Ser Ile Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
                   50                  55                  60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
                   65                  70                  75                  80  
 Glu Asp Phe Ala Ser Tyr Tyr Cys Gln Gln Ser Asn Ser Phe Pro Arg  
                   85                  90                  95  
 Phe Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
                   100                  105

<210> 358  
 <211> 95  
 <212> PRT  
 <213> homo sapiens

<400> 358  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp  
 20 25 30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ile Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Asn Ser Phe Pro  
 85 90 95

<210> 359  
 <211> 95  
 <212> PRT  
 <213> homo sapiens

<220>  
 <221> VARIANT  
 <222> 53  
 <223> Xaa = Any Amino Acid

<221> VARIANT  
 <222> 53  
 <223> Xaa = Any Amino Acid

<400> 359  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp  
 20 25 30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Xaa Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Ser Tyr Tyr Cys Gln Gln Ser Asn Ser Phe Pro  
 85 90 95

<210> 360  
 <211> 127  
 <212> PRT  
 <213> homo sapiens

<400> 360  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala





20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Ser Gly Xaa Thr Gly Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys  
 85 90 95  
 Ala Arg

<210> 363  
 <211> 111  
 <212> PRT  
 <213> homo sapiens

<400> 363  
 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
 1 5 10 15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
 20 25 30  
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Leu Lys Pro Gly Gln Ser  
 35 40 45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Ser Arg Ala Ser Gly Val Pro  
 50 55 60  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
 65 70 75 80  
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Thr  
 85 90 95  
 Leu Gln Thr Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys  
 100 105 110

<210> 364  
 <211> 100  
 <212> PRT  
 <213> homo sapiens

<400> 364  
 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
 1 5 10 15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
 20 25 30  
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Leu Lys Pro Gly Gln Ser  
 35 40 45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro  
 50 55 60  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
 65 70 75 80  
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala  
 85 90 95  
 Leu Gln Thr Pro  
 100

<210> 365  
 <211> 99  
 <212> PRT  
 <213> homo sapiens

<220>  
 <221> VARIANT  
 <222> 43, 58, 96  
 <223> Xaa = Any Amino Acid

<221> VARIANT  
 <222> 43, 58, 96  
 <223> Xaa = Any Amino Acid

<400> 365  
 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
 1 5 10 15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
 20 25 30  
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Xaa Lys Pro Gly Gln Ser  
 35 40 45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Xaa Arg Ala Ser Gly Val Pro  
 50 55 60  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
 65 70 75 80  
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Xaa  
 85 90 95  
 Leu Gln Thr

<210> 366  
 <211> 126  
 <212> PRT  
 <213> homo sapiens

<400> 366  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20 25 30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Ala Lys Tyr Ser Pro Ser Phe  
 50 55 60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
 85 90 95  
 Ala Arg His Tyr Asp Tyr Val Trp Arg Asn Tyr Arg Tyr Thr Gly Trp  
 100 105 110  
 Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser  
 115 120 125

<210> 367  
 <211> 98

<212> PRT  
 <213> homo sapiens

<400> 367  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20 25 30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
 50 55 60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65 70 75  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 368  
 <211> 98  
 <212> PRT  
 <213> homo sapiens

<220>  
 <221> VARIANT  
 <222> 58  
 <223> Xaa = Any Amino Acid

<221> VARIANT  
 <222> 58  
 <223> Xaa = Any Amino Acid

<400> 368  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1 5 10 15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20 25 30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Xaa Lys Tyr Ser Pro Ser Phe  
 50 55 60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65 70 75  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 369  
 <211> 108  
 <212> PRT  
 <213> homo sapiens

<400> 369

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser  
 20 25 30  
 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
 35 40 45  
 Ile Tyr Gly Ala Ser Asn Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu  
 65 70 75 80  
 Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Leu  
 85 90 95  
 Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys  
 100 105

<210> 370

<211> 96

<212> PRT

<213> homo sapiens

<400> 370

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser  
 20 25 30  
 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
 35 40 45  
 Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu  
 65 70 75 80  
 Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro  
 85 90 95

<210> 371

<211> 95

<212> PRT

<213> homo sapiens

<220>

<221> VARIANT

<222> 54

<223> Xaa = Any Amino Acid

<221> VARIANT

<222> 54

<223> Xaa = Any Amino Acid

<400> 371

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser  
 20 25 30  
 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
 35 40 45

Ile Tyr Gly Ala Ser Xaa Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu  
 65 70 75 80  
 Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser  
 85 90 95

<210> 372  
 <211> 125  
 <212> PRT  
 <213> homo sapiens

<400> 372  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Ile Asn Pro Asn Ser Gly Asn Thr Asp Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Ile Tyr Tyr Cys  
 85 90 95  
 Val Arg Gly Phe Gly Tyr Ser Tyr Asn Tyr Asp Tyr Tyr Tyr Gly Met  
 100 105 110  
 Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120 125

<210> 373  
 <211> 98  
 <212> PRT  
 <213> homo sapiens

<400> 373  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Asp Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 374  
 <211> 98  
 <212> PRT

<213> homo sapiens  
 <220>  
 <221> VARIANT  
 <222> 59, 73, 97  
 <223> Xaa = Any Amino Acid

<221> VARIANT  
 <222> 59, 73, 97  
 <223> Xaa = Any Amino Acid

<400> 374  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Ile Asn Pro Asn Ser Gly Asn Thr Xaa Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Xaa Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Ile Tyr Tyr Cys  
 85 90 95  
 Xaa Arg

<210> 375  
 <211> 108  
 <212> PRT  
 <213> homo sapiens

<400> 375  
 Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser  
 20 25 30  
 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
 35 40 45  
 Ile Tyr Ala Thr Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
 50 55 60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu  
 65 70 75 80  
 Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro  
 85 90 95  
 Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys  
 100 105

<210> 376  
 <211> 96  
 <212> PRT  
 <213> homo sapiens

<400> 376  
 Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly

1		5		10		15									
Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Ser	Val	Ser	Ser	Ser
		20						25					30		
Tyr	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu
		35					40					45			
Ile	Tyr	Gly	Thr	Ser	Ser	Arg	Ala	Thr	Gly	Ile	Pro	Asp	Arg	Phe	Ser
		50				55					60				
Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Arg	Leu	Glu
65					70					75				80	
Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Tyr	Gly	Ser	Ser	Pro
			85						90					95	

<210> 377

<211> 96

<212> PRT

<213> homo sapiens

<400> 377

Glu	Ile	Val	Leu	Thr	Gln	Ser	Pro	Gly	Thr	Leu	Ser	Leu	Ser	Pro	Gly
1				5					10					15	
Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Ser	Val	Ser	Ser	Ser
		20						25					30		
Tyr	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu
		35					40					45			
Ile	Tyr	Ala	Thr	Ser	Ser	Arg	Ala	Thr	Gly	Ile	Pro	Asp	Arg	Phe	Ser
		50				55					60				
Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Arg	Leu	Glu
65					70					75				80	
Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Tyr	Gly	Ser	Ser	Pro
			85						90					95	